VPDES PERMIT PROGRAM FACT SHEET

FILE NO: 228

This document gives pertinent information concerning the VPDES Permit listed below. This permit is being processed as a **MAJOR, MUNICIPAL** permit.

1. **PERMIT NO.**: VA0023922 **EXPIRATION DATE**: 6/22/14

2. **FACILITY NAME AND LOCAL MAILING ADDRESS**

City of Franklin WWTP
P. O. Box 179
Franklin, Va. 23851

FACILITY LOCATION ADDRESS (IF DIFFERENT)

501 S. Main Street
Franklin, Va. 23851

CONTACT AT FACILITY:
NAME: Mr. Russell L. Pace
TITLE: Director of Public Works
PHONE: (757)562-8564

CONTACT AT LOCATION ADDRESS
NAME: Mr. Donnie Cagle
TITLE: WWTP Chief Operator
PHONE: (757)562-8551

3. **OWNER CONTACT**: (TO RECEIVE PERMIT)
NAME: Mr. Robert Martin
TITLE: City Manager
COMPANY NAME: City of Franklin
ADDRESS: P. O. Box 179
Franklin, Va. 23851
PHONE: (757)-562-8564

CONSULTANT CONTACT:
NAME:
FIRM NAME:
ADDRESS:

4. **PERMIT DRAFTED BY**: DEQ, Water Permits, Regional Office

Permit Writer(s): Robert Smithson RES Date(s): 3/10/14
Reviewed By: Deanna Austin DDA Date(s): 3/26/14

5. **PERMIT ACTION:**

( ) Issuance (X) Reissuance ( ) Revoke & Reissue ( ) Owner Modification
( ) Board Modification ( ) Change of Ownership/Name [Effective Date:]

6. **SUMMARY OF SPECIFIC ATTACHMENTS LABELED AS**:

Attachment 1	Site Inspection Report/Memorandum
Attachment 2	Discharge Location/Topographic Map
Attachment 3	Schematic/Plans & Specs/Site Map/Water Balance
Attachment 4	TABLE I - Discharge/Outfall Description
Attachment 5	TABLE II - Effluent Monitoring/Limitations
Attachment 6	Effluent Limitations/Monitoring Rationale/Suitable Data/Antidegradation/Antibacksliding
Attachment 7	Special Conditions Rationale
Attachment 8	Toxics Monitoring/Toxics Reduction/WET Limit Rationale
Attachment	Material Stored
Attachment 9	Receiving Waters Info./Tier Determination/STORET Data/Stream Modeling
Attachment 9	303(d) Listed Segments
Attachment 10	TABLE III(a) and TABLE III(b) - Change Sheets
Attachment N/A	EPA Permit Checklist
Attachment 12	Chronology Sheet
Attachment 13	Other Documents

APPLICATION COMPLETE: 03/14/14 (no exposure stormwater certification received)

7. **PERMIT CHARACTERIZATION:** (Check as many as appropriate)

(X) Existing Discharge
( ) Proposed Discharge
(X) Municipal
SIC Code(s) 4952
( ) Industrial
SIC Code(s)
(X) POTW
( ) PVOTW
( ) Private
( ) Federal
( ) State
( ) Publicly-Owned Industrial

(X) Effluent Limited
(X) Water Quality Limited
( ) WET Limit
( ) Interim Limits in Permit
( ) Interim Limits in Other Document
( ) Compliance Schedule Required
( ) Site Specific WQ Criteria
( ) Variance to WQ Standards
(X) Water Effects Ratio
(X) Discharge to 303(d) Listed Segment
(X) Toxics Management Program Required
( ) Toxics Reduction Evaluation
( ) Storm Water Management Plan
( ) Pretreatment Program Required
( ) Possible Interstate Effect
( ) CBP Significant Dischargers List

8. **RECEIVING WATERS CLASSIFICATION:** River basin information.

Outfall No(s): 001

Receiving Stream:	Blackwater River
River Mile:	5ABLW013.56
Basin:	Chowan and Dismal Swamp
Subbasin:	Chowan River
Section:	1
Class:	II
Special Standard(s):	NEW-21
Tidal:	Freshwater-Tidal
7-Day/10-Year Low Flow:	0.028 MGD
1-Day/10-Year Low Flow:	0.0058 MGD
30-Day/5-Year Low Flow:	1.07 MGD
Harmonic Mean Flow:	NA MGD

9. **FACILITY DESCRIPTION:** Describe the type facility from which the discharges originate.

EXISTING municipal discharge resulting from the discharge of treated domestic sewage.

10. **LICENSED OPERATOR REQUIREMENTS:** ( ) No (X) Yes Class: I

11. **RELIABILITY CLASS:** Class I

12. **SITE INSPECTION DATE:** 02/11/14 **REPORT DATE:** 02/27/14

Performed By: Clyde Gantt

SEE ATTACHMENT 1

13. **DISCHARGE(S) LOCATION DESCRIPTION:** Provide USGS Topo which indicates the discharge location, significant (large) discharger(s) to the receiving stream, water intakes, and other items of interest.

Name of Topo: Franklin Quadrant No.: 05B **SEE ATTACHMENT 2**

14. ATTACH A SCHEMATIC OF THE WASTEWATER TREATMENT SYSTEM(S) [IND. & MUN.]. FOR INDUSTRIAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE PRODUCTION CYCLE(S) AND ACTIVITIES. FOR MUNICIPAL FACILITIES, PROVIDE A GENERAL DESCRIPTION OF THE TREATMENT PROVIDED.

SEE ATTACHMENT 3

15. DISCHARGE DESCRIPTION: Describe each discharge originating from this facility.

SEE TABLE I - SEE ATTACHMENT 4

16. COMBINED TOTAL FLOW:

TOTAL: 2.0 MGD (for public notice)

PROCESS FLOW: _____ MGD (IND.)

NONPROCESS/RAINFALL DEPENDENT FLOW: _____(Est.)

DESIGN FLOW: 2.0 MGD (MUN.)

17. STATUTORY OR REGULATORY BASIS FOR EFFLUENT LIMITATIONS AND SPECIAL CONDITIONS: (Check all which are appropriate)

X State Water Control Law
X Clean Water Act
X VPDES Permit Regulation (9 VAC 25-31-10 et seq.)
X EPA NPDES Regulation (Federal Register)
_____ EPA Effluent Guidelines (40 CFR 133 or 400 - 471)
X Water Quality Standards (9 VAC 25-260-5 et seq.)
_____ Wasteload Allocation from a TMDL or River Basin Plan

18. EFFLUENT LIMITATIONS/MONITORING: Provide all limitations and monitoring requirements being placed on each outfall.

SEE TABLE II - ATTACHMENT 5

19. EFFLUENT LIMITATIONS/MONITORING RATIONALE: Attach any analyses of an outfall by individual toxic parameter. As a minimum, it will include: statistics summary (number of data values, quantification level, expected value, variance, covariance, 97th percentile, and statistical method); wasteload allocation (acute, chronic and human health); effluent limitations determination; input data listing. Include all calculations used for each outfall and set of effluent limits and those used in any model(s). Include all calculations/documentation of any antidegradation or anti-backsliding issues in the development of any limitations; complete the review statements below. Provide a rationale for limiting internal waste streams and indicator pollutants. Attach chlorine mass balance calculations, if performed. Attach any additional information used to develop the limitations, including any applicable water quality standards calculations (acute, chronic and human health).

OTHER CONSIDERATIONS IN LIMITATIONS DEVELOPMENT:

VARIANCES/ALTERNATE LIMITATIONS: Provide justification or refutation rationale for requested variances or alternatives to required permit conditions/limitations. This includes, but is not limited to: waivers from testing requirements; variances from technology guidelines or water quality standards; WER/translator study consideration; variances from standard permit limits/conditions.

N/A

SUITABLE DATA: In what, if any, effluent data were considered in the establishment of effluent limitations and provide all appropriate information/calculations.

All suitable effluent data were reviewed.

ANTIDEGRADATION REVIEW: Provide all appropriate information/calculations for the antidegradation review.

The receiving stream has been classified as tier 1; therefore, no further review is needed. Permit limits have been established by determining wasteload allocations which will result in attaining and/or maintaining all water quality criteria which apply to the receiving stream, including narrative criteria. These wasteload allocations will provide for the protection and maintenance of all existing uses.

ANTIBACKSLIDING REVIEW: Indicate if antibacksliding applies to this permit and, if so, provide all appropriate information.

There are no backsliding issues to address in this permit (i.e., limits as stringent or more stringent when compared to the previous permit

SEE ATTACHMENT 6

20. **SPECIAL CONDITIONS RATIONALE**: Provide a rationale for each of the permit's special conditions.

SEE ATTACHMENT 7

21. **TOXICS MONITORING/TOXICS REDUCTION AND WET LIMIT SPECIAL CONDITIONS RATIONALE**: Provide the justification for any toxics monitoring program and/or toxics reduction program and WET limit.

SEE ATTACHMENT 8

22. **SLUDGE DISPOSAL PLAN**: Provide a description of the sludge disposal plan (e.g., type sludge, treatment provided and disposal method). Indicate if any of the plan elements are included within the permit.

The facility handles sludge by 1) composting it on site for local resident use, 2) hauling sludge offsite by a contractor who composts it for sale and 3) hauling excess sludge to the Waverly (Sussex) landfill. This plan has been included in this VPDES application for VDH and DEQ approval. Limitations, reporting and standard special conditions pertaining to this plan are included in Part I of the permit.

23. **MATERIAL STORED**: List the type and quantity of wastes, fluids, or pollutants being stored at this facility. Briefly describe the storage facilities and list, if any, measures taken to prevent the stored material from reaching State waters.

NONE.

24. **RECEIVING WATERS INFORMATION**: Refer to the State Water Control Board's Water Quality Standards [e.g., River Basin Section Tables (9 VAC 25-260-5 et seq.). **Use 9 VAC 25-260-140 C (introduction and numbered paragraph) to address tidal waters where fresh water standards would be applied or transitional waters where the most stringent of fresh or salt water standards would be applied.** Attach any memoranda or other information which helped to develop permit conditions (i.e. tier determinations, PReP complaints, special water quality studies, STORET data and other biological and/or chemical data, etc.

SEE ATTACHMENT 9

25. 305(b)/**303(d) Listed Segments**: Indicate if the facility discharges to a segment that is listed on the current 303(d) list and, if so, provide all appropriate information/calculations.

This facility discharges directly to the Blackwater River. This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of D.O. and E. coli. A TMDL has not been prepared or approved for this stream segment. The permit has water quality-based limits for both D.O. and E.coli which have been achieved and require compliance with the standard prior to discharge. Given these limits, this facility can neither cause or contribute to the observed violation of the standards. The permit contains a TMDL reopener clause which will allow these limits to be modified, in compliance with Section 303(d)(4) of the Act once a TMDL is approved.

This facility discharges directly to the Blackwater River. This receiving stream segment has been listed in Category 5 of the 305(b)/303(d) list for non-attainment of Mercury in fish tissue. A TMDL has not been prepared or approved for this stream segment. The permit contains a TMDL reopener clause which will allow these limits to be modified, in compliance with Section 303(d)(4) of the Act once a TMDL is approved.

SEE ATTACHMENT 9

6. **CHANGES TO PERMIT**: Use **TABLE III(a)** to record any changes from the previous permit and the rationale for those changes. Use **TABLE III(b)** to record any changes made to the permit during the permit processing period and the rationale for those changes [i.e., use for comments from the applicant, VDH, EPA, other agencies and/or the public where comments resulted in changes to the permit limitations or any other changes associated with the special conditions or reporting requirements].

SEE ATTACHMENT 10

27. **NPDES INDUSTRIAL PERMIT RATING WORKSHEET**:

TOTAL SCORE: _____ SEE ATTACHMENT _

N/A - This is a municipal facility.

28. **DEQ PLANNING COMMENTS RECEIVED ON DRAFT PERMIT**: Document any comments received from DEQ planning.

The discharge is not addressed in any planning document but will be included when the plan is updated.

29. **PUBLIC PARTICIPATION**: Document comments/responses received during the public participation process. If comments/responses provided, especially if they result in changes to the permit, place in the attachment.

VDH/DSS COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the Virginia Dept. of Health and the Div. of Shellfish Sanitation and noted how resolved.

The VDH reviewed the application and waived their right to comment and/or object on the adequacy of the draft permit. VDH Memo received Feb. 7, 2014 recommended a minimum Reliability Class I.

The DSS has no comments on the application/draft permit. Email received 3/24/14.

EPA COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from the U.S. Environmental Protection Agency and noted how resolved.

EPA has no objections to the adequacy of the draft permit.
By letter dated _____, the EPA provided the following comments:

ADJACENT STATE COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from an adjacent state and noted how resolved.

Not Applicable.

OTHER AGENCY COMMENTS RECEIVED ON DRAFT PERMIT: Document any comments received from any other agencies (e.g., VIMS, VMRC, DGIF, etc.) and noted how resolved. The draft permit was sent to VMRC and no comments were received

OTHER COMMENTS RECEIVED FROM RIPARIAN OWNERS/CITIZENS ON DRAFT PERMIT: Document any comments received from other sources and note how resolved.

The application and draft permit have received public notice in accordance with the VPDES Permit Regulation, and no comments were received.

PUBLIC NOTICE INFORMATION: Comment Period: Start Date 4/20/14
End Date 5/20/14

Persons may comment in writing or by e-mail to the DEQ on the proposed reissuance of the permit within 30 days from the date of the first notice. Address all comments to the contact person listed below. Written or e-mail comments shall include the name, address, and telephone number of the writer, and shall contain a complete, concise statement of the factual basis for comments. Only those comments received within this period will be considered. The Director of the DEQ may decide to hold a public hearing if public response is significant. Requests for public hearings shall state the reason why a hearing is requested, the nature of the issues proposed to be raised in the public hearing and a brief explanation of how the requestor's interests would be directly and adversely affected by the proposed permit action.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Robert Smithsonat: Department of Environmental Quality (DEQ), Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, VA 23462. Telephone: 757-518-2106 E-mail: robert.smithsonjr@deq.virginia.gov

Following the comment period, the Board will make a determination regarding the proposed reissuance This determination will become effective, unless the Director grants a public hearing. Due notice of any public hearing will be given.

30. **ADDITIONAL FACT SHEET COMMENTS/PERTINENT INFORMATION:**

Because the design flow of this municipal facility is greater than 1 MGD, stormwater regulation implementation was considered. Previous application information has indicated that stormwater from the wastewater treatment plant is sheet flow (no point source discharge). Stormwater is not addressed in the permit due to no exposure (copy of certification received from the facility on 03/14/14); forms follows on the next page.

This permit does include a TMP (refer to attachment 8).

Outfall information was submitted for review through DCR's Natural Heritage Program for threatened and endangered species impacts. By letter dated March 12, 2014 DCR stated that "the current activity will not affect any documented state-listed plants or insects" (refer to attachment 13).

RES
7

VIRGINIA DEQ NO EXPOSURE CERTIFICATION
FOR EXCLUSION FROM VPDES INDUSTRIAL ACTIVITY STORMWATER PERMITTING

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its stormwater discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in stormwater discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9VAC25-31-120 E (the VPDES Permit Regulation).

Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.

1. **Facility Operator Information**

   Name: Donnie Cagle

   Mailing Address: 501 S. Main Street

   City: Franklin State: VA Zip: 23851 Phone: 757-562-8551

2. **Facility/Site Location Information**

   Facility Name: City of Franklin Wastewater Treatment Plant

   Address: 501 S. Main Street

   City: Franklin State: VA Zip: 23851

   County Name: Southampton

   Latitude: N 36 40' 19" Longitude: W 76 55' 05"

3. **Was the facility or site previously covered under a VPDES stormwater permit?** Yes ☐ No ☑

   If "Yes", enter the VPDES permit number: N/A

4. **SIC/Activity Codes:** Primary: 4952 Secondary (if applicable): _____

5. **Total size of facility/site associated with industrial activity:** 6 acres

6. **Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion?** Yes ☐ No ☑

   If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether stormwater discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

   Less than one acre ☐ One to five acres ☐ More than five acres ☐

HD
RECEIVED – DEQ
MAR 14 2014
Tidewater Regional Office

7. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are NOT eligible for the No Exposure exclusion.**

	Yes	No
(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to stormwater	☐	☑
(2) Materials or residuals on the ground or in stormwater inlets from spill/leaks	☐	☑
(3) Materials or products from past industrial activity	☐	☑
(4) Material handling equipment (except adequately maintained vehicles)	☐	☑
(5) Materials or products during loading/unloading or transporting activities	☐	☑
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to stormwater does not result in the discharge of pollutants)	☐	☑
(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	☐	☑
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger	☐	☑
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	☐	☑
(10) Application or disposal of process wastewater (unless otherwise permitted)	☐	☑
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater outflow	☐	☑

8. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES stormwater permitting; and that there are no discharges of stormwater contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9VAC25-31-120 E 2).

I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of stormwater associated with industrial activity from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: Russell L. Pace

Print Title: Director of Public Works

Email Address: rpace@frankliva.com

Signature: Russell L. Pace Date: 3/12/14

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: Robert C. Smithson Jr. Date: 3/14/14

ATTACHMENT 1

SITE INSPECTION REPORT/MEMORANDUM

Facility:	CITY OF FRANKLIN WWTP
County/city:	FRANKLIN

VPDES NO.	VA0023922

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTEWATER FACILITY
INSPECTION REPORT
PART 1

Inspection date:	**February 11, 2014**	Date form completed:	**February 14, 2014**
Inspection by:	**Clyde Gantt**	Inspection agency:	**DEQ/TRO**
Time spent:	**10 Hours**	Announced Inspection:	[ ] Yes [X] No
Reviewed by: **Kenneth T. Raum / 02-20-14** KTR		Photographs taken at site?	[ ] Yes [X] No
Present at inspection:	**Donnie Cagle – Plant Manager (757) 562-8551**		

FACILITY TYPE:	FACILITY CLASS:
(X) Municipal	(X) Major
( ) Industrial	( ) Minor
( ) Federal	( ) Small
( ) VPA/NDC	( ) High Priority ( ) Low Priority

TYPE OF INSPECTION:

Routine	X	Reinspection		Compliance/assistance/complaint	

Date of previous inspection:	**April 29, 2011**	Agency:	**DEQ/TRO**

Population Served:		Connections Served:	

Last Month Average: Influent	BOD_5 (mg/l)	**N/A**	TSS (mg/l)	**N/A**	Flow (MGD)	**N/A**		
	Other: **D.O. – 4.8 mg/l, pH – 6.7 s.u.**							
Last Month Average: Effluent	BOD_5 (mg/l)	**<QL**	TSS (mg/l)	**3**	Flow (MGD)	**1.0**	NH_3 (mg/l)	**<QL**
	Other: **TN – 13.1 mg/l, TP – 1.1 mg/l**							
Last Quarter Average: Effluent	BOD_5 (mg/l)	**<QL**	TSS (mg/l)	**2.3**	Flow (MGD)	**1.0**	NH_3 (mg/l)	**<QL**
	Other: **TN – 7.1 mg/l, TP – 1.5 mg/l**							

COPIES TO: (X) DEQ/TRO; (X) OWNER; ( ) OPERATOR; ( ) Other:

Franklin WWTP VA0023922

PLANT OPERATION AND MAINTENANCE																
1.	Class/number of licensed operators:	I	1	II	2	III	0	IV	1	Trainee						
2.	Hours per day plant manned?	**10-11 Hrs/Day: M-F; 8 Hrs/Day: Sat. & Sun.**														
3.	Describe adequacy of staffing	GOOD		AVERAGE		X	POOR									
4.	Does the plant have an established program for training personnel	YES		NO	X											
5.	Describe the adequacy of training	GOOD		AVERAGE		POOR	X									
6.	Are preventative maintenance tasks scheduled	YES	X	NO												
7.	Describe the adequacy of maintenance	GOOD		AVERAGE	X	POOR										
8.	Does the plant experience any organic/hydraulic overloading?	YES	X	NO												
	If yes, identify cause/impact on plant	**Loss of clarifier blanket/solids discharge**														
9.	Any bypassing since last inspection?	YES		NO	X											
10.	Is the standby electrical generator operational?	YES	X	NO		NA										
11.	How often is the standby generator exercised?	**Weekly**														
	Power transfer switch?	**N/A**	ALARM SYSTEM?	**Not Checked*** **												
12.	When was the cross connection last tested on the potable supply?	**Not verfied**														
13.	Is the STP alarm system operational?	YES	X	NO		NA										
14.	Is sludge disposed in accordance with an approved SMP	YES		NO	X	NA										
15.	Is septage received by the facility?	YES		NO	X											
	Is septage loading controlled?	YES		NO		NA	X									
	Are records maintained?	YES		NO		NA	X									

OVERALL APPEARANCE OF FACILITY	GOOD		AVERAGE	X	POOR	

COMMENTS:	**5 - The SCAT Regulations recommend that a plant of this size be staffed 16 hours a day.** **8 - Any significant rainfall generally causes clarifier blanket loss and solids discharge.** **11 -Plant operated with a "SCADA"computer system. Alarms cannot be checked with system.** **24 – Sludge disposal with McGill in not in the current SMP. However, that option is listed in the permit application received 1/28/14.**

PROBLEMS IDENTIFIED AT LAST INSPECTION:		CORRECTED	NOT CORRECTED
1	No documentation of UV intensity was available.		X

SUMMARY

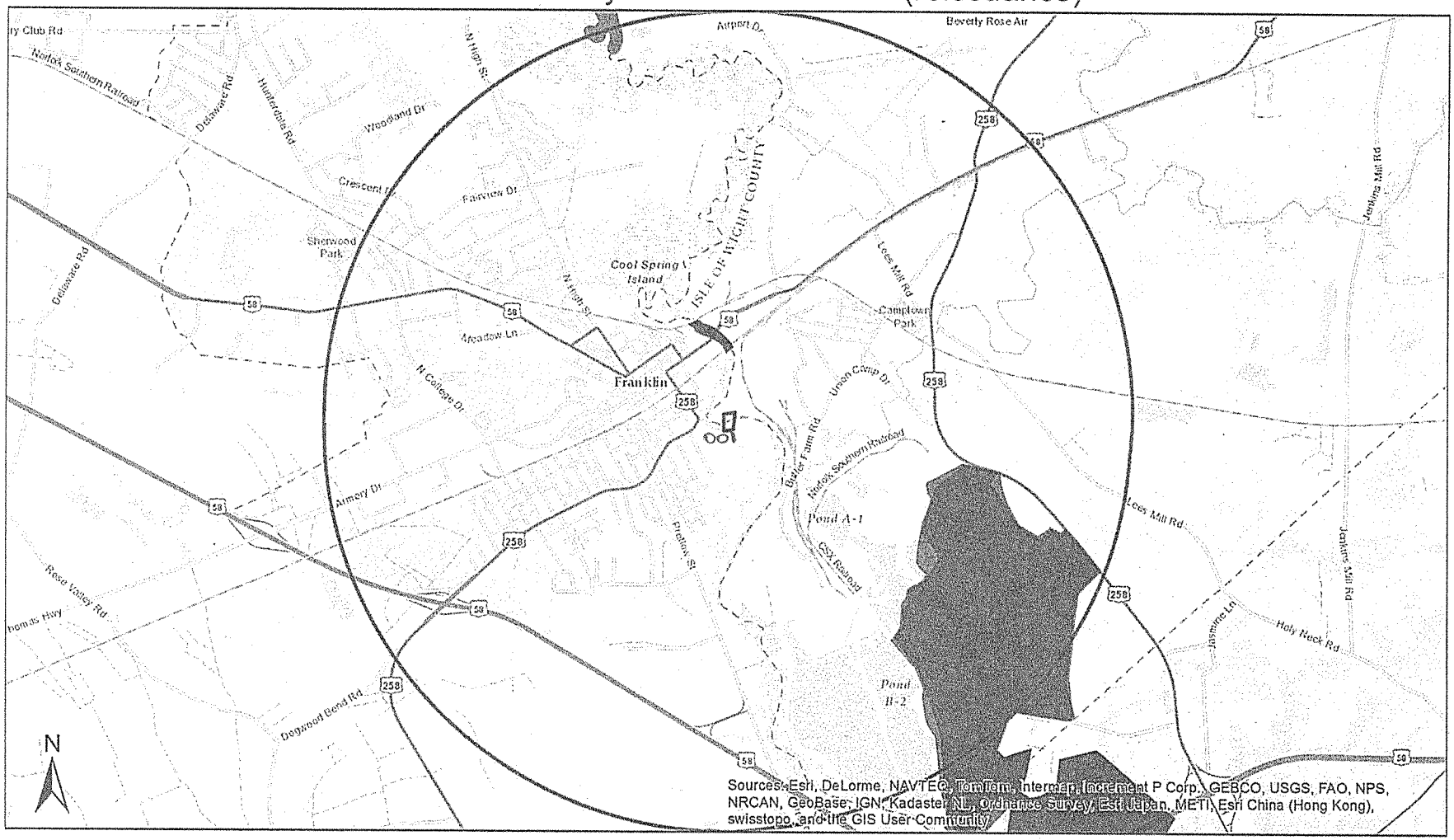
INSPECTION COMMENTS:	
1	This facility appears to be operating at minimum staffing, process testing and general operating levels. The Schreiber Process seems to function very well, allowing minimum levels.
2	This plant has had problems with I&I in the past. During calendar year 2013, flows were over the design flow on 11 days. There were two instances of sludge blanket loss/solids discharge during the year. Installation of direct polymer feed to the secondary influent appears to have helped with the solids discharge problem.
3	The UV system is operating without an intensity meter. The only way to determine the effectiveness is the 3/week E. Coli sample results. However those results are only available several days after the discharge.

COMPLIANCE RECOMMENDATIONS FOR ACTION:	
1	Since there is no way to verify the UV functional conditions, increased staff oversight is required. Please submit a letter to DEQ describing what measures have been implemented to ensure optimal UV system operation and discharge disinfection.
2	Please ensure that the O&M Manual reflects current UV system operations.

ATTACHMENT 2

DISCHARGE LOCATION/TOPOGRAPHIC MAP

VA0023922-City of Franklin WWTP (reissuance)



Project Area
Buffered Project Area
NH Screening Features
Conservation Site
GLNHR
SCU

1:51,875
0 0.425 0.85 1.7 mi
0 0.5 1 2 km

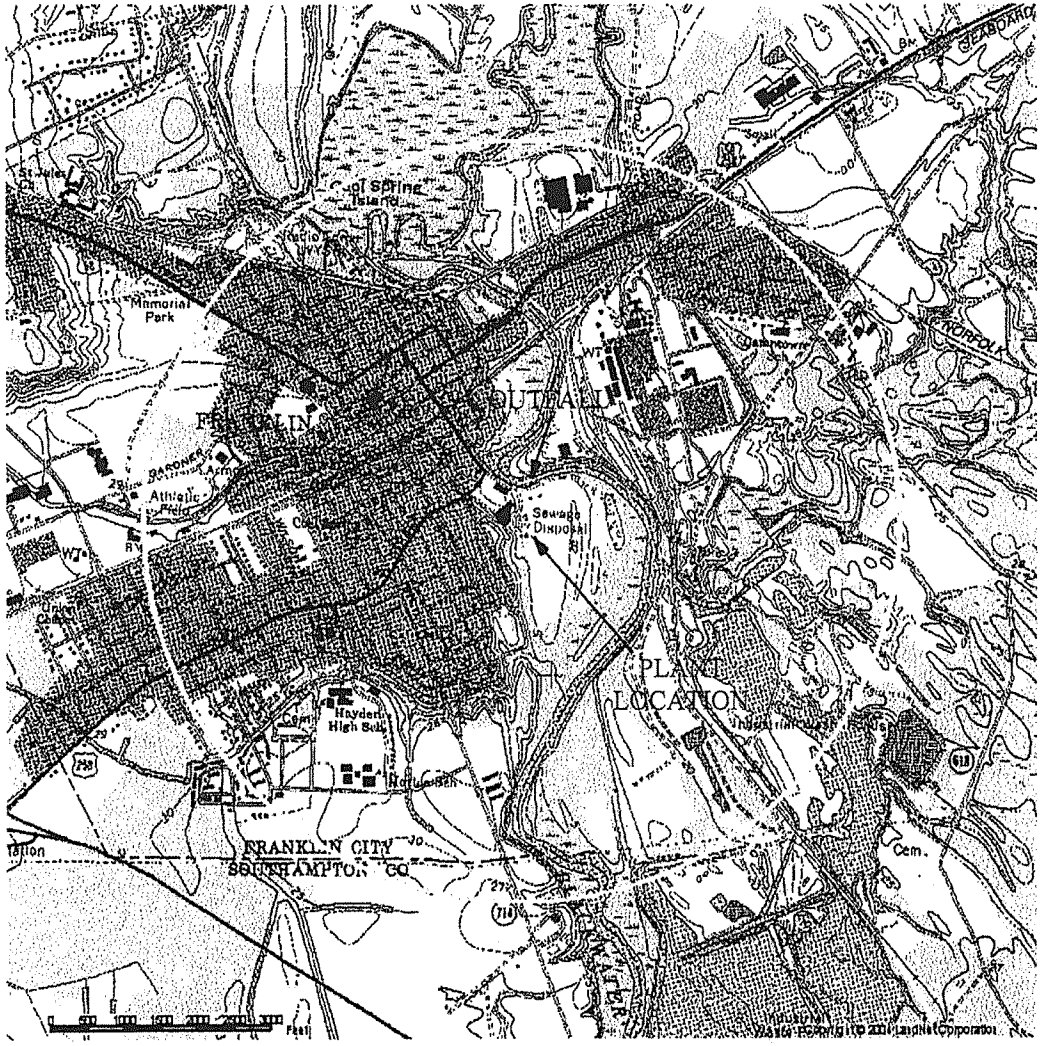
Quads: Franklin

Counties: Isle of Wight, City of Franklin

Company: DEQ-Tidewater Regional Office

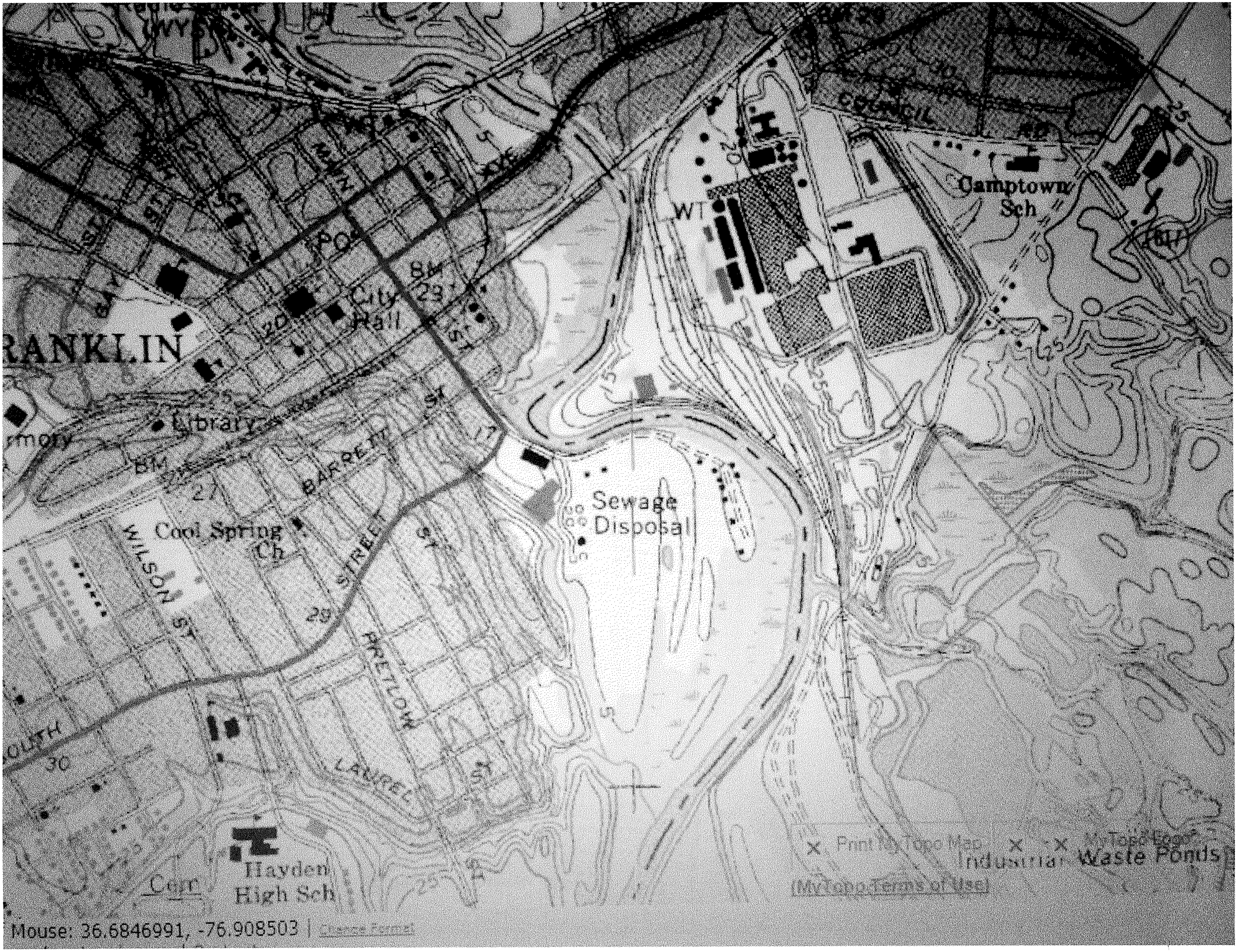
Lat/Long: 364027 / -765500

FRANKLIN Topo 5B.
VA0023922



City of Franklin Wastewater Treatment Plant
Owner: City of Franklin
Operator: George Donald Cagle Jr., Plant Manager
NPDES Permit: VA0023922
Latitude: N36°40'19"
Longitude: W76°55'05"

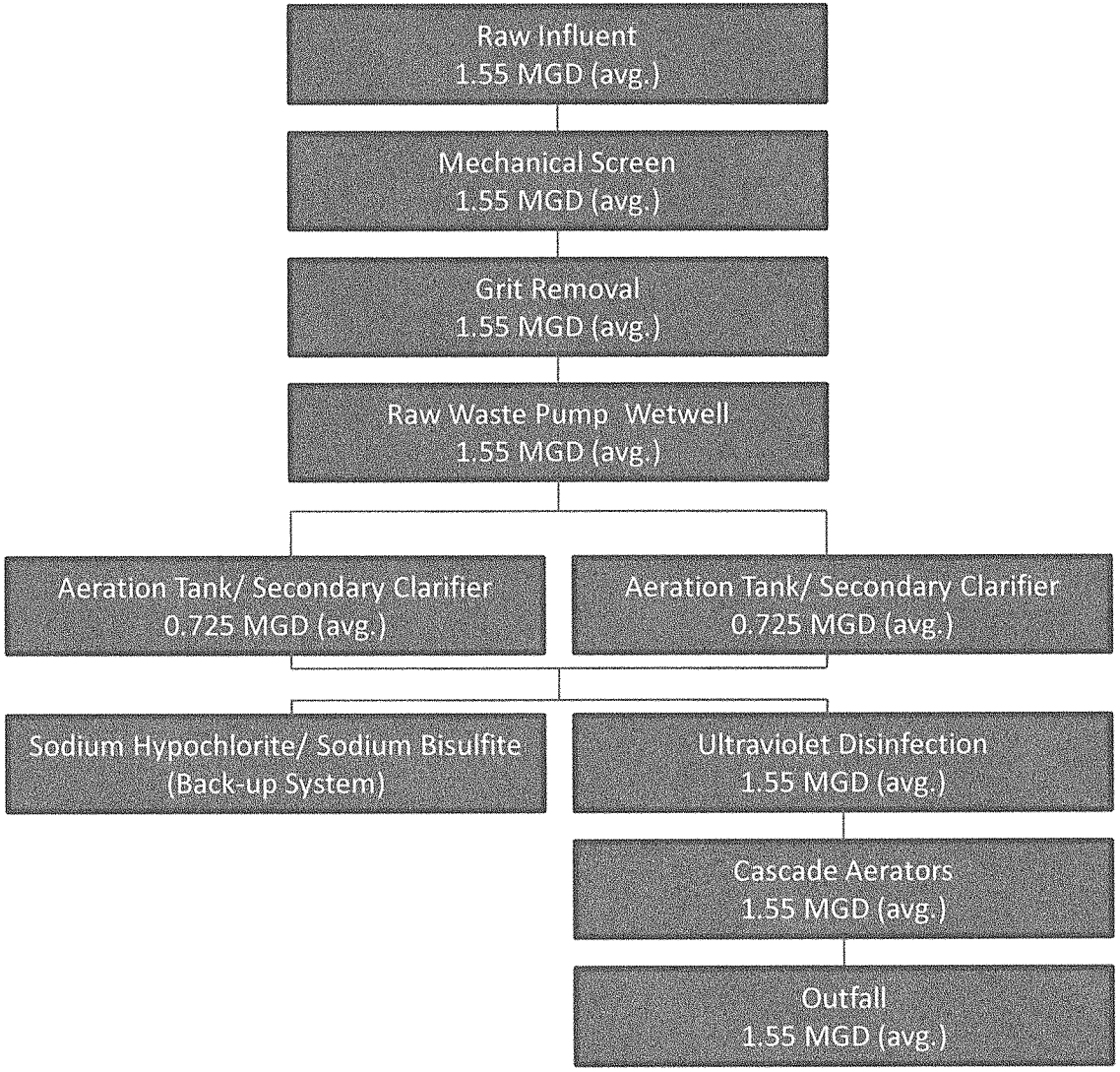
5

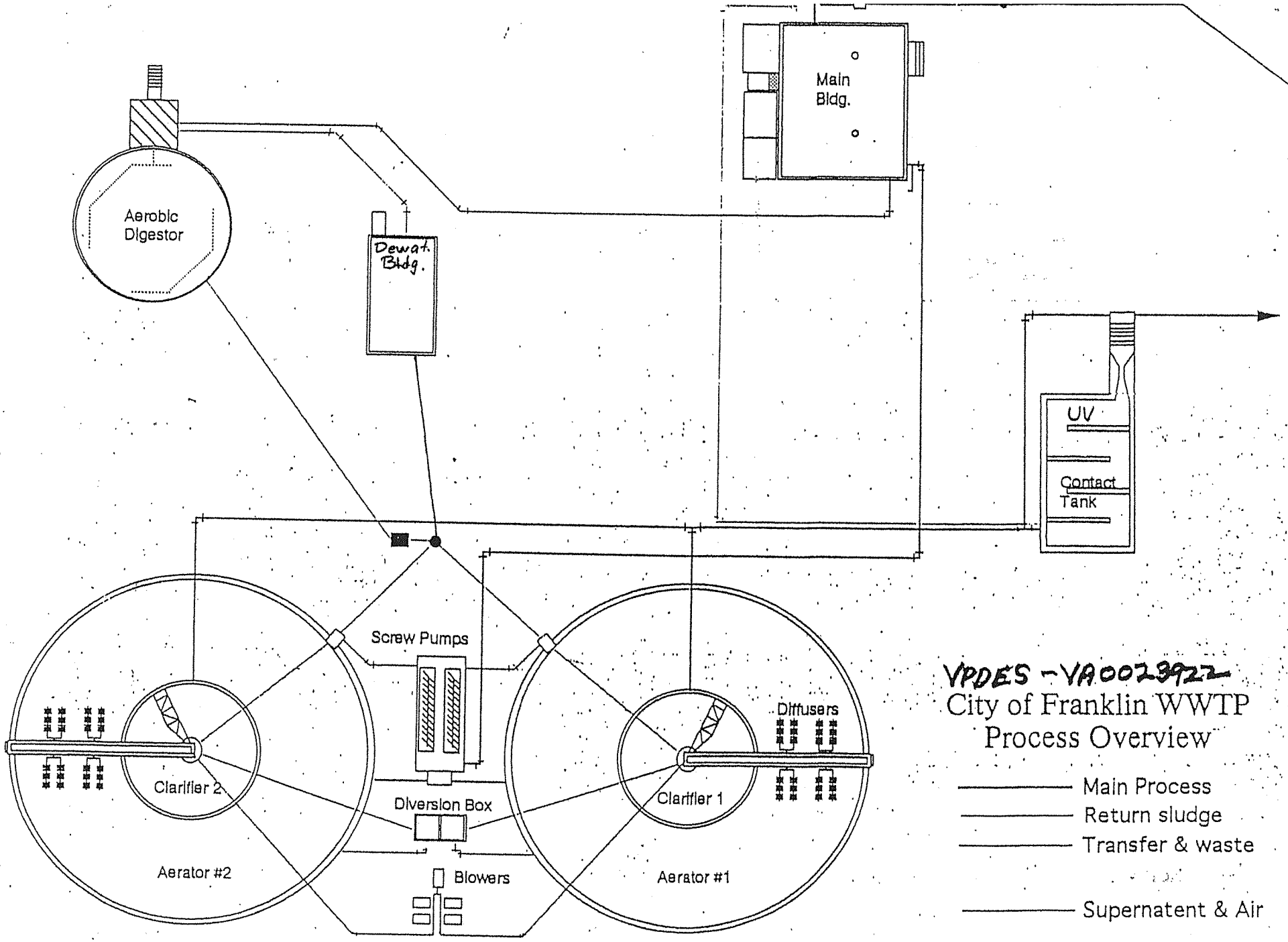

RANKLIN
City Hall
MAIN
Library
BARRETT
STREET
WILSON ST
Cool Spring Ch
PRETLOW
LAUREL
Hayden High Sch
Sewage Disposal
WT
COUNCIL RD
Camptown Sch
Industrial Waste Ponds
Print MyTopo Map
MyTopo Terms of Use
Mouse: 36.6846991, -76.908503 | Change Format

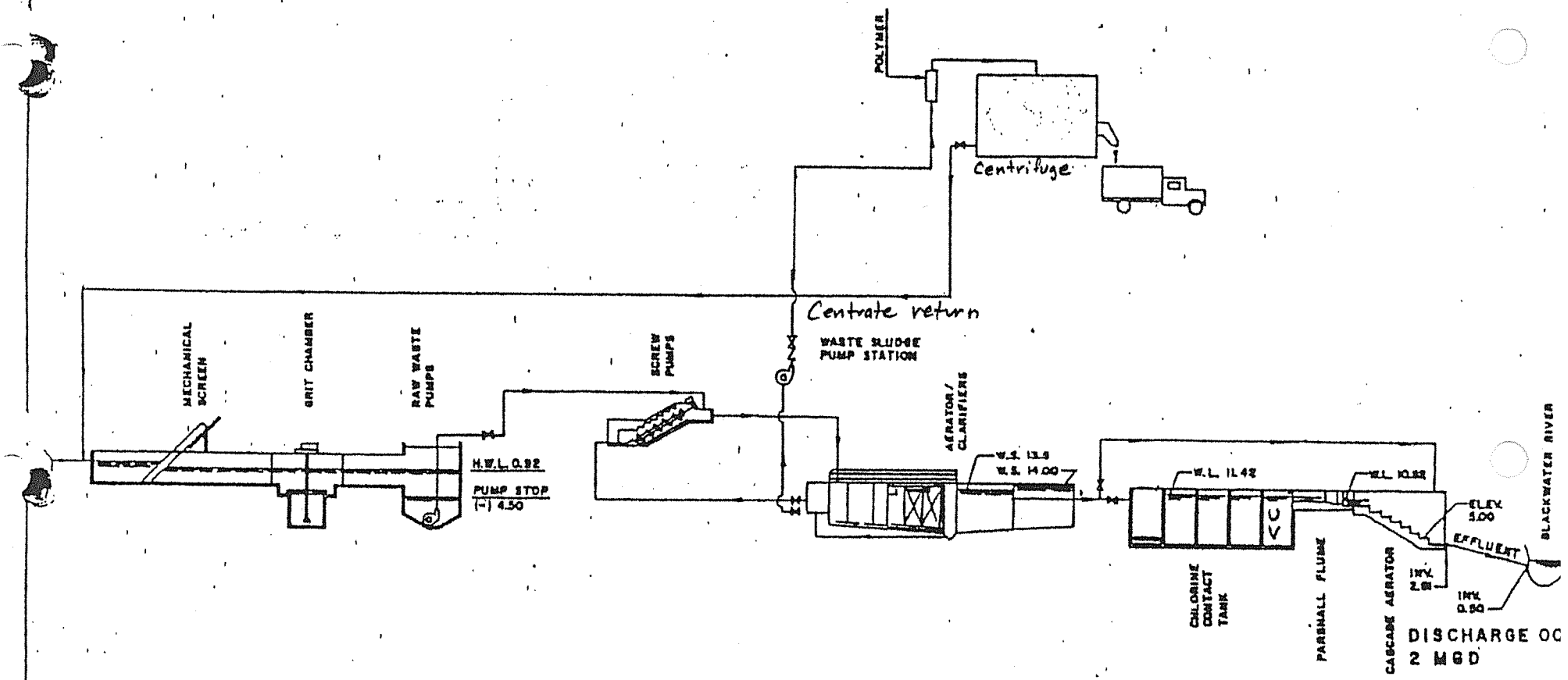
ATTACHMENT 3

SCHEMATIC/PLANS & SPECS/SITE MAP/ WATER BALANCE

City of Franklin WWTP
Flow Schematic




Main Bldg.
Aerobic Digestor
Dewat. Bldg.
UV
Contact Tank
Screw Pumps
Diffusers
Clarifier 2
Clarifier 1
Diversion Box
Aerator #2
Blowers
Aerator #1
VPDES - VA0023922
City of Franklin WWTP
Process Overview
Main Process
Return sludge
Transfer & waste
Supernatent & Air



SCHEMATIC OF WASTEWATER FLOW
FRANKLIN SEWAGE TREATMENT PLAN
FRANKLIN, VIRGINIA
DISCHARGE SERIAL NO. 001

ATTACHMENT 4

TABLE I - DISCHARGE/OUTFALL DESCRIPTION

TABLE I

NUMBER AND DESCRIPTION OF OUTFALLS

OUTFALL NO.	DISCHARGE LOCATION	DISCHARGE SOURCE (1)	TREATMENT (2)	FLOW (3)
001	36 40 25 76 55 05	Domestic wastewater discharge from a municipal WWTP	Treatment consists of screening, grit removal, activated sludge, extended aeration, secondary sedimentation, UV disinfection, and post aeration. Sludge is aerobically digested and dewatered using centrifuges.	2.0 MGD* *Design flow

(1) List operations contributing to flow
(2) Give brief description, unit by unit
(3) Give maximum 30-day average flow for industry and design flow for municipal

ATTACHMENT 5

TABLE II - EFFLUENT MONITORING/LIMITATIONS

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING

OUTFALL # 001 DESIGN FLOW: 2.0 MGD
Outfall Description: Outfall for the Franklin WWTP
SIC CODE: 4952

(X) Final Limits ( ) Interim Limits Effective Dates - From: reissuance To: expiration

PARAMETER & UNITS	BASIS FOR LIMITS	DESIGN FLOW MULTIPLIER	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Flow (MGD) [a] [2]	3		NL	NA	NA	NL	##	TI & RE*
pH (S.U.)	3		NA	NA	6.0	9.0	1/Month	Grab
BOD5 (mg/l) [c]	1		30	45	NA	NA	5 Days/Week	24 Hr Comp
BOD5 (kg/d)	1	2.0	227	341	NA	NA	5 Days/Week	24 Hr Comp
TSS (mg/l) [c]	1		30	45	NA	NA	5 Days/Week	24 Hr Comp
TSS (kg/d)	1	2.0	227	341	NA	##	5 Days/Week	24 Hr Comp
TRC (mg/l) [b] [c]	2		0.008	0.008	NA	NA	1/Day	Grab
D.O. (mg/l)	3		NA	NA	6.0	NA	1/Day	Grab
E.Coli (N/100ml) [b]	2		126	NA	NA	NA	3 Days/Week @ 48 hr intervals (Between 10 am & 4 pm)	Grab
Ammonia-Nitrogen (NH_3-N) [c]	2		1.9	1.9	NA	NA	1/Month	24 Hr Comp
Total Phosphorus (mg/l)	3		2.0	NL	NA	NA	1/Week	24 Hr Comp
T. Phosphorus (kg/d)	3	2.0	15	NL	NA	NA	1/Week	24 Hr Comp
Total Nitrogen (mg/l)	3		NL	NL	NA	NA	1/Week	24 Hr Comp
Total Nitrogen (kg/d)	3		NL	NL	NA	NA	1/Week	24 Hr Comp

PARAMETER & UNITS	BASIS FOR LIMITS	DESIGN FLOW MULTIPLIER	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
			MONTHLY AVERAGE	WEEKLY AVERAGE	MINIMUM	MAXIMUM	FREQUENCY	SAMPLE TYPE
Total Recoverable Cadmium (ug/l) [c]	2		0.56	0.56	NA	NA	1/3 Months	24 Hr Comp
Total Recoverable Copper (ug/l) [c]	2		46.4	NA	NA	46.4	1/3 Months	24 Hr Comp
Total Recoverable Zinc (ug/l) [c]	2		36.2	36.2	NA	NA	1/3 Months	24 Hr Comp
Total Recoverable Silver (ug/l) [c]	2		0.32	0.32	NA	NA	1/3 Months	24 Hr Comp

*Totalizing, Indicating & Recording Equipment

NA = NOT APPLICABLE; NL = NO LIMIT, MONITORING REQUIREMENT ONLY

1/3 Months = In accordance with the following schedule: 1st quarter (January 1 - March 31); 2nd quarter (April 1 - June 30); 3rd quarter (July 1 - September 30); 4th quarter (October 1 - December 31).

Upon issuance of the permit, Discharge Monitoring Reports (DMRs) shall be submitted to the regional office at the frequency required by the permit regardless of whether an actual discharge occurs. In the event that there is no discharge for the monitoring period, then "no discharge" shall be reported on the DMR.

[a] See Part I.C.5. for 95% capacity exceedances
[b] See Part I.B for total residual chlorine limitations and bacterial effluent limitations.
[c] See Parts I.C.6. and I.C.7. for quantification levels and reporting requirements, respectively.

2. The design flow of this treatment facility is 2.0 MGD
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

The basis for the limitations codes are:
1. Technology (e.g., Federal Effluent Guidelines)
2. Water Quality Standards (9 VAC 25-260 et. seq.)
3. Best Professional Judgment

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING

A. LIMITATIONS AND MONITORING REQUIREMENTS - SLUDGE

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to manage sewage sludge according to the approved Sludge Management Plan. The pollutants in sewage sludge shall be limited and monitored by the permittee as specified below:

a. Annual Sludge Production Data

Report annual total amount of sludge produced, in dry metric tons, including units and annual amount of sludge used or disposed in various methods (if applicable).

b. Chemical Pollutant Limitations

SLUDGE PARAMETERS REQUIREMENTS	LIMITATIONS		MONITORING	
	Monthly Average (mg/kg)*	Ceiling Concentration Maximum (mg/kg)*	Frequency	Sample Type
Percent Solids	NL	NA	**	Composite
Total Arsenic	41	75	**	Composite
Total Cadmium	39	85	**	Composite
Total Copper	1,500	4,300	**	Composite
Total Lead	300	840	**	Composite
Total Mercury	17	57	**	Composite
Total Molybdenum	NA	75	**	Composite
Total Nickel	420	420	**	Composite
Total Selenium	100	100	**	Composite
Total Zinc	2,800	7,500	**	Composite

TABLE II - MUNICIPAL EFFLUENT LIMITATIONS/MONITORING

A. LIMITATIONS AND MONITORING REQUIREMENTS - SLUDGE (cont.)

NL = No limitation, monitoring required
NA = Not applicable
* = Dry weight basis, unless otherwise stated.
** = Frequency of sampling biosolids from each generator is based on the amount of biosolids produced for land application See table below for frequency.

Amount of biosolids (dry tons per 365-day period)	**Sampling Frequency**
Greater than zero but less than 320	Once per year
Equal to or greater than 320 but less than 1653	Once per quarter (four times per year)
Equal to or greater than 1653 but less than 16,535	Once per 60 days (six times per year)
Equal to or greater than 16,535	Per month (12 times per year)

c. Pathogen Reduction Limitations (Identify the chosen class/alternative(s) in accordance with the approved SMP (may be more than one), specify the applicable monitoring/operation parameters.)

For example: Class B, Alternative 1, fecal coliform less than either 2,000,000 MPN/g or 2,000,000 CFU/g; or Class B, Alternative 2, anaerobic digestion - Sewage sludge shall be treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

d. Vector Attraction Reduction Limitations: The permittee shall comply with one of the applicable vector attraction reduction alternatives specified in 9 VAC 25-31-720 B.

e. All samples shall be collected and analyzed in accordance with the approved O & M Manual.

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Franklin City - Wastewater Treatment Plant
ADDRESS 501 S Main St
Franklin VA 23851
FACILITY LOCATION 501 S Main St, Franklin, VA 23851

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0023922	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Major 03/27/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: **READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.**

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
001 FLOW	REPORTD				*********	*********	*********				
	REQRMNT	2.0	NL	MGD	*********	*********	*********			CONT	REC
002 PH	REPORTD	*********	*********			*********					
	REQRMNT	*********	*********		6.0	*********	9.0	SU		1/DAY	GRAB
003 BOD5	REPORTD				*********						
	REQRMNT	227	341	KG/D	*********	30	45	MG/L		5D/W	24HC
004 TSS	REPORTD				*********						
	REQRMNT	227	341	KG/D	*********	30	45	MG/L		5D/W	24HC
007 DO	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		6.0	*********	*********	MG/L		1/DAY	GRAB
012 PHOSPHORUS, TOTAL (AS P)	REPORTD				*********						
	REQRMNT	15	NL	KG/D	*********	2.0	NL	MG/L		1/W	24HC
013 NITROGEN, TOTAL (AS N)	REPORTD				*********						
	REQRMNT	NL	NL	KG/D	*********	NL	NL	MG/L		1/W	24HC
039 AMMONIA, AS N	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	1.9	1.9	MG/L		1/M	24HC

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
QLs = CL2 0.1 mg/l, NH-3 0.2 mg/l, TSS 1.0 mg/l, BOD5 2 mg/l

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

926

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Franklin City - Wastewater Treatment Plant
ADDRESS 501 S Main St
Franklin VA 23851
FACILITY LOCATION 501 S Main St, Franklin, VA 23851

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0023922	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Major 04/07/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: **READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.**

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
120 E.COLI	REPORTD				*********		*********				
	REQRMNT	********	********		*********	126	*********	N/CML		3D/W	GRAB
157 CL2, TOTAL CONTACT	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		1.0	*********	*********	MG/L	12	4/DAY	GRAB
158 CL2, TOTAL FINAL	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	0.008	0.008	MG/L	0	1/DAY	GRAB
186 SILVER, TOTAL RECOVERABLE	REPORTD				*********		*********				
	REQRMNT	********	********		*********	0.32	*********	UG/L		1/3M	24HC
196 ZINC, TOTAL RECOVERABLE	REPORTD	*********	*********		*********		*********				
	REQRMNT	*********	*********		*********	36	*********	UG/L		1/3M	24HC
202 CADMIUM, TOTAL RECOVERABLE	REPORTD	*********	*********		*********		*********				
	REQRMNT	*********	*********		*********	0.56	*********	UG/L		1/3M	24HC
203 COPPER, TOTAL RECOVERABLE	REPORTD				*********						
	REQRMNT	********	********		*********	46.4	46.4	UG/L		1/3M	24HC
213 CL2, INST TECH MIN LIMIT	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		0.60	*********	*********	MG/L		1/DAY	GRAB

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
QLs = CL2 0.1 mg/l, NH-3 0.2 mg/l, TSS 1.0 mg/l, BOD5 2 mg/l

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Franklin City - Wastewater Treatment Plant
ADDRESS 501 S Main St
Franklin VA 23851
FACILITY LOCATION 501 S Main St, Franklin, VA 23851

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0023922	SP1
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Major 03/24/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: **READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.**

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
672 SOLIDS, TOTAL, SLUDGE AS PERCENT	REPORTD	*********	*********		*********		*********				
	REQRMNT	*********	*********		*********	NL	*********	%		1/3M	COMP
680 ARSENIC, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	41	75	MG/KG		1/3M	COMP
681 MOLYBDENUM, SLUDGE	REPORTD	*********	*********		*********	*********					
	REQRMNT	*********	*********		*********	*********	75	MG/KG		1/3M	COMP
682 ZINC, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	2,800	7,500	MG/KG		1/3M	COMP
683 LEAD, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	300	840	MG/KG		1/3M	COMP
684 NICKEL, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	420	420	MG/KG		1/3M	COMP
685 MERCURY, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	17	57	MG/KG		1/3M	COMP
686 COPPER, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	1,500	4,300	MG/KG		1/3M	COMP

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
mg/kg are on a dry weight basis; parameters 691, 693 & 696 are measured in dry metric tons per year (MTNYR, defined as 100% solids content)

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

2 of 2

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Franklin City - Wastewater Treatment Plant
ADDRESS 501 S Main St
Franklin VA 23851
FACILITY LOCATION 501 S Main St, Franklin, VA 23851

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

VA0023922	SP1
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

Municipal Major 03/24/2014

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Tidewater Regional Office
5636 Southern Boulevard
Virginia Beach VA 23462

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
687 CADMIUM, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	39	85	MG/KG		1/3M	COMP
691 ANNUAL AMT SLUDGE DISPOSED BY OTHER MTHD	REPORTD	*********			*********	*********	*********				
	REQRMNT	*********	NL	MTNYR	*********	*********	*********			1/YR	COMP
693 ANNUAL SLUDGE PRODUCTION TOTAL	REPORTD	*********			*********	*********	*********				
	REQRMNT	*********	NL	MTNYR	*********	*********	*********			1/YR	COMP
696 ANNUAL AMT SLUDGE DISPOSED IN LANDFILL	REPORTD	*********			*********	*********	*********				
	REQRMNT	*********	NL	MTNYR	*********	*********	*********			1/YR	COMP
697 SELENIUM, SLUDGE	REPORTD	*********	*********		*********						
	REQRMNT	*********	*********		*********	100	100	MG/KG		1/3M	COMP
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS
mg/kg are on a dry weight basis; parameters 691, 693 & 696 are measured in dry metric tons per year (MTNYR, defined as 100% solids content)

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

Page 2

This report is required by your VPDES permit and by law. (See, e.g., the Code of Virginia of 1950 §62.1-44.5 and 9 VAC 25-31-50.) Failure to report or failure to report truthfully can result in civil penalties of $32,500 per violation, per day and felony prosecutions which can carry a 15 year term.

DISCHARGE MONITORING REPORT (DMR) - GENERAL INSTRUCTIONS

1. Complete this form in permanent ink or indelible pencil. The use of 'correction fluid/tape' is not allowed.
2. Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period".
3. For those parameters where the "permit requirement" spaces have a requirement or limitation, provide data in the "reported" spaces in accordance with your permit.
4. Enter the average and maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading".
   KG/DAY = Concentration (mg/L) x Flow (MGD) x 3.785 G/D (Grams/Day) = Concentration (mg/L) x Flow (MGD) x 3785
5. Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration".
6. For all parameters enter the number of samples which do not comply with the maximum and/or minimum permit requirements in the "reported" space in the column marked "No. Ex." (Number of Exceedances). If none, enter "0". Do NOT include monthly average violations in this field. Include any Maximum 7-Day Average and Maximum Weekly Average violations in this field. Permittees with continuous pH, or temperature monitoring requirements should consult the permit for what constitutes an exceedance and report accordingly.
7. You are required to sample (at a minimum) according to the Sample Frequencies and Sample Types specified in your permit.
8. Enter the actual frequency of analysis for each parameter (number of times per day, week, month, etc.) in the "reported" space in the column marked "Frequency of Analysis".
9. Enter the actual type of sample (Grab, 8HC, 24HC, etc) collected for each parameter in the "reported" space in the column marked "Sample Type".
10. Enter additional required data or comments in the space marked "additional permit requirements or comments". If additional required data or comments are appended to the DMR, reference appended correspondence in this field.
11. Record the number of bypasses during the month, the total flow in million gallons (MG) and BOD5 in kilograms (KG) in the proper columns in the section marked "Bypasses and Overflows".
12. The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator or if the operator in responsible charge of the facility is a licensed operator, the operator's signature and certificate number must be reported in the spaces provided.
13. The principal executive officer then reviews the form and must sign in the space provided and provide a telephone number where he/she can be reached. Every page of the DMR must have an original signature.
14. Send the completed form(s) with original signatures to your Department of Environmental Quality Regional Office by the 10th of each month unless otherwise specified in the permit.
15. You are required to retain a copy of the report for your records.
16. Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each separate violation by date.
17. If you have any questions, contact the Department of Environmental Quality Regional Office listed on the DMR.

ATTACHMENT 6

EFFLUENT LIMITATIONS/MONITORING RATIONALE/SUITABLE DATA/ ANTIDEGRADATION/ANTIBACKSLIDING

RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING

There has been little to no change with this permit since the last permit reissuance. There has been no new receiving stream information or facility information received. Therefore, there is no change in any permit limits from the previous permit.

Outfall 001

Flow: No limit, monitoring is required with continuous, totalizing, indicating or recording equipment. This based on the VPDES Permit Manual, and is standard for sanitary wastewater plants with discharges 2 MGD or greater. The design flow of 2.0 MGD is the baseline for the 95% design flow capacity notification.

pH: Minimum limit of 6.0 and maximum of 9.0 S.U. These limits are based on Federal Effluent Guidelines (40 CFR 133.102). Monitoring is a daily grab sample and is standard for sanitary WW plants with discharges 2 MGD or greater.

BOD5: Monthly average of 30 mg/l and 227 kg/day and a weekly average of 45 mg/l and 341 kg/day. This is based on Federal Effluent Guidelines (40 CFR 133.102) which sets the limits for secondary WW plants. Monitoring required is a 24 hour composite, 5 days a week. Monitoring frequency is based on the VPDES permit manual.

TSS: Monthly average of 30 mg/l and 227 kg/day and a weekly average of 45 mg/l and 341 kg/day. This is based on Federal Effluent Guidelines (40 CFR 133.102) which sets the limits for secondary WW plants. Monitoring required is a 24 hour composite, 5 days a week. Monitoring frequency is based on the VPDES permit manual.

Total Phosphorus: Monthly average of 2.0 mg/l and 15 kg/day is based on the DEQ Regulation for Nutrient Enriched Waters for WWTP over 1MGD (9 VAC 25-40-30). Monitoring required is a 24 hour composite, 1/week.

Total Nitrogen: Monthly average of No limit (NL) for both concentration (mg/l) and loading (kg/d). Monitoring is required 1/week with a 24 hour composite. TN was first added to the permit based upon the DEQ nutrient policy. Monitoring and frequency will be carried forward for this reissuance based upon best professional judgment (BPJ). The Blackwater River remains classified as Nutrient Enriched Waters in the Virginia Water Quality Standards.

D.O.: Minimum limit of 6.0 taken as a grab sample. This limit is carried forward from the previous permit. BPJ to protect water quality.

E. Coli: Monthly average limit of 126 N/100 ml at a 3 Day/Week frequency taken at 48 hour intervals between the times of 10AM and 4PM. 48 hour intervals are to ensure continuous adequate disinfection. This limit is carried forward from the current permit and is required based on water quality standards 9 VAC 25-260-170.

TRC: Total residual chlorine is only in the permit as a backup for UV disinfection. Limits of 0.0080 monthly and weekly average are carried forward from the previous permit. TRC monitoring will only occur when the alternate disinfection (UV) is not in use. The monitoring frequency will be 1/Day if there is a need to monitoring TRC.

Ammonia (NH_3): Monthly and weekly average limits of 1.9 mg/l had been previously established and will be carried forward to the current permit. Monitoring is 1/Month using a 24 hour composite.

Total Recoverable Cadmium: Monthly and weekly average limits of 0.56 ug/l had been previously established based on water quality standards modeling from data submitted by the permittee. These limits and the monitoring frequency of 1/3 Months, using a 24-hour composite will be carried forward to the current permit.

Total Recoverable Copper: Monthly average limit and a maximum limit of 46.4 ug/l had been previously established based on the results of a site specific alternative criteria study. Franklin performed a Water Effects Ratio(WER)study and submitted the results in January 2007. The WER was approved by EPA in December 2007. The permit was modified to include the WER for Copper in 2008 and was signed 5/8/08. The following language taken from the Water Quality Standards (9 VAC 25-260-140) applies to WERs.

Water effect ratio.

1. A water effects ratio (WER) shall be determined by measuring the effect of receiving water (as it is or will be affected by any discharges) on the bioavailability or toxicity of a metal by using standard test organisms and a metal to conduct toxicity tests simultaneously in receiving water and laboratory water. The ratio of toxicities of the metal(s) in the two waters is the WER (toxicity in receiving water divided by toxicity in laboratory water = WER. Once an acceptable WER for a metal is established, the numerical value for the metal in subsection B of this section is multiplied by the WER to produce an instream concentration that will protect designated uses. This instream concentration shall be utilized in permitting decisions.

2. The WER shall be assigned a value of 1.0 unless the applicant or permittee demonstrates to the department's satisfaction in a permit proceeding that

another value is appropriate, or unless available data allow the department to compute a WER for the receiving waters. The applicant or permittee is responsible for proposing and conducting the study to develop a WER.

4. The Environmental Protection Agency views the WER in any particular case as a site-specific criterion. Therefore, the department's Division of Scientific Research or its successor shall submit the results of the study to the Environmental Protection Agency for review and approval/disapproval within 30 days of the receipt of certification from the state's Office of the Attorney General. Nonetheless, the WER is established in a permit proceeding, shall be described in the public notice associated with the permit proceeding, and applies only to the applicant or permittee in that proceeding. The department's action to approve or disapprove a WER is a case decision, not an amendment to the present regulation.

The limits and monitoring frequency of 1/3 Months, using a 24-hour composite will be carried forward to the current permit.

Total Recoverable Silver: Monthly and weekly average limits of 0.32 ug/l had been previously established based on water quality standards modeling from data submitted by the permittee. These limits and the monitoring frequency of 1/3 Months, using a 24-hour composite will be carried forward to the current permit.

Total Recoverable Zinc: Monthly and weekly average limits of 36 ug/l had been previously established based on water quality standards modeling from data submitted by the permittee. These limits and the monitoring frequency of 1/3 Months, using a 24-hour composite will be carried forward to the current permit.

FRESHWATER
WATER QUALITY CRITERIA / WASTELOAD ALLOCATION ANALYSIS

Facility Name: Franklin WWTP Permit No.: VA0023922

Receiving Stream: Blackwater River Version: OWP Guidance Memo 00-2011 (8/24/00)

Stream Information

Mean Hardness (as CaCO3) =	38 mg/L
90% Temperature (Annual) =	26.7 deg C
90% Temperature (Wet season) =	23.6 deg C
90% Maximum pH =	6.9 SU
10% Maximum pH =	6.1 SU
Tier Designation (1 or 2) =	1
Public Water Supply (PWS) Y/N? =	n
Trout Present Y/N? =	n
Early Life Stages Present Y/N? =	y

Stream Flows

1Q10 (Annual) =	0.0058 MGD
7Q10 (Annual) =	0.028 MGD
30Q10 (Annual) =	N/A MGD
1Q10 (Wet season) =	MGD
30Q10 (Wet season)	MGD
30Q5 =	1.07 MGD
Harmonic Mean =	MGD

Mixing Information

Annual - 1Q10 Mix =	70.74 %
- 7Q10 Mix =	100 %
- 30Q10 Mix =	100 %
Wet Season - 1Q10 Mix =	%
- 30Q10 Mix =	%

Effluent Information

Mean Hardness (as CaCO3) =	22 mg/L
90% Temp (Annual) =	27 deg C
90% Temp (Wet season) =	deg C
90% Maximum pH =	7.62 SU
10% Maximum pH =	7.08 SU
Discharge Flow =	2 MGD

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Acenapthene	5	--	--	na	9.9E+02	--	--	na	1.5E+03	--	--	--	--	--	--	--	--	--	--	na	1.5E+03
Acrolein	0	--	--	na	9.3E+00	--	--	na	1.4E+01	--	--	--	--	--	--	--	--	--	--	na	1.4E+01
Acrylonitrile[C]	0	--	--	na	2.5E+00	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Aldrin [C]	0	3.0E+00	--	na	5.0E-04	3.0E+00	--	na	#VALUE!	--	--	--	--	--	--	--	--	3.0E+00	--	na	#VALUE!
Ammonia-N (mg/l) (Yearly)	0	1.66E+01	#VALUE!	na	--	1.66E+01	#VALUE!	na	--	--	--	--	--	--	--	--	--	1.66E+01	#VALUE!	na	--
Ammonia-N (mg/l) (High Flow)	0	#VALUE!	#VALUE!	na	--	#VALUE!	#VALUE!	na	--	--	--	--	--	--	--	--	--	#VALUE!	#VALUE!	na	--
Anthracene	0	--	--	na	4.0E+04	--	--	na	6.1E+04	--	--	--	--	--	--	--	--	--	--	na	6.1E+04
Antimony	0	--	--	na	6.4E+02	--	--	na	9.8E+02	--	--	--	--	--	--	--	--	--	--	na	9.8E+02
Arsenic	o	3.4E+02	1.5E+02	na	--	3.4E+02	1.5E+02	na	--	--	--	--	--	--	--	--	--	3.4E+02	1.5E+02	na	--
Barium	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Benzene [C]	0	--	--	na	5.1E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Benzidine[C]	0	--	--	na	2.0E-03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Benzo (a) anthracene [C]	0	--	--	na	1.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Benzo (b) fluoranthene [C]	0	--	--	na	1.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Benzo (k) fluoranthene [C]	0	--	--	na	1.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Benzo (a) pyrene [C]	0	--	--	na	1.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Bis2-Chloroethyl Ether [C]	0	--	--	na	5.3E+00	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Bis2-Chloroisopropyl Ether	0	--	--	na	6.5E+04	--	--	na	1.0E+05	--	--	--	--	--	--	--	--	--	--	na	1.0E+05
Bis 2-Ethylhexyl Phthalate [C]	0	--	--	na	2.2E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Bromoform [C]	0	--	--	na	1.4E+03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Butylbenzylphthalate	0	--	--	na	1.9E+03	--	--	na	2.9E+03	--	--	--	--	--	--	--	--	--	--	na	2.9E+03
Cadmium	0	8.2E-01	3.8E-01	na	--	8.2E-01	3.9E-01	na	--	--	--	--	--	--	--	--	--	8.2E-01	3.9E-01	na	--
Carbon Tetrachloride [C]	0	--	--	na	1.6E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Chlordane [C]	0	2.4E+00	4.3E-03	na	8.1E-03	2.4E+00	4.4E-03	na	#VALUE!	--	--	--	--	--	--	--	--	2.4E+00	4.4E-03	na	#VALUE!
Chloride	0	8.6E+05	2.3E+05	na	--	8.6E+05	2.3E+05	na	--	--	--	--	--	--	--	--	--	8.6E+05	2.3E+05	na	--
TRC	0	1.9E+01	1.1E+01	na	--	1.9E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.9E+01	1.1E+01	na	--
Chlorobenzene	0	--	--	na	1.6E+03	--	--	na	2.5E+03	--	--	--	--	--	--	--	--	--	--	na	2.5E+03

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH
Chlorodibromomethane[C]	0	--	--	na	1.3E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Chloroform	0	--	--	na	1.1E+04	--	--	na	1.7E+04	--	--	--	--	--	--	--	--	--	--	na	1.7E+04
2-Chloronaphthalene	0	--	--	na	1.6E+03	--	--	na	2.5E+03	--	--	--	--	--	--	--	--	--	--	na	2.5E+03
2-Chlorophenol	0	--	--	na	1.5E+02	--	--	na	2.3E+02	--	--	--	--	--	--	--	--	--	--	na	2.3E+02
Chlorpyrifos	0	8.3E-02	4.1E-02	na	--	8.3E-02	4.2E-02	na	--	--	--	--	--	--	--	--	--	8.3E-02	4.2E-02	na	--
Chromium III	0	1.8E+02	2.4E+01	na	--	1.8E+02	2.4E+01	na	--	--	--	--	--	--	--	--	--	1.8E+02	2.4E+01	na	--
Chromium VI	0	1.6E+01	1.1E+01	na	--	1.6E+01	1.1E+01	na	--	--	--	--	--	--	--	--	--	1.6E+01	1.1E+01	na	--
Chromium, Total	0	--	--	1.0E+02	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
Chrysene [C]	0	--	--	na	1.8E-02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Copper	0	3.6E+00	2.7E+00	na	--	3.6E+00	2.8E+00	na	--	--	--	--	--	--	--	--	--	3.6E+00	2.8E+00	na	--
Cyanide, Free	0	2.2E+01	5.2E+00	na	1.6E+04	2.2E+01	5.3E+00	na	2.5E+04	--	--	--	--	--	--	--	--	2.2E+01	5.3E+00	na	2.5E+04
DDD [C]	0	--	--	na	3.1E-03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
DDE [C]	0	--	--	na	2.2E-03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
DDT [C]	0	1.1E+00	1.0E-03	na	2.2E-03	1.1E+00	1.0E-03	na	#VALUE!	--	--	--	--	--	--	--	--	1.1E+00	1.0E-03	na	#VALUE!
Demeton	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	--	1.0E-01	na	--
Diazinon	0	1.7E-01	1.7E-01	na	--	1.7E-01	1.7E-01	na	--	--	--	--	--	--	--	--	--	1.7E-01	1.7E-01	na	--
Dibenz(a,h)anthracene [C]	0	--	--	na	1.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
1,2-Dichlorobenzene	0	--	--	na	1.3E+03	--	--	na	2.0E+03	--	--	--	--	--	--	--	--	--	--	na	2.0E+03
1,3-Dichlorobenzene	0	--	--	na	9.6E+02	--	--	na	1.5E+03	--	--	--	--	--	--	--	--	--	--	na	1.5E+03
1,4-Dichlorobenzene	0	--	--	na	1.9E+02	--	--	na	2.9E+02	--	--	--	--	--	--	--	--	--	--	na	2.9E+02
3,3-Dichlorobenzidine[C]	0	--	--	na	2.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Dichlorobromomethane [C]	0	--	--	na	1.7E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
1,2-Dichloroethane [C]	0	--	--	na	3.7E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
1,1-Dichloroethylene	0	--	--	na	7.1E+03	--	--	na	1.1E+04	--	--	--	--	--	--	--	--	--	--	na	1.1E+04
1,2-trans-dichloroethylene	0	--	--	na	1.0E+04	--	--	na	1.5E+04	--	--	--	--	--	--	--	--	--	--	na	1.5E+04
2,4-Dichlorophenol	0	--	--	na	2.9E+02	--	--	na	4.5E+02	--	--	--	--	--	--	--	--	--	--	na	4.5E+02
2,4-Dichlorophenoxy acetic acid (2,4-D)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	--	--	na	--
1,2-Dichloropropane[C]	0	--	--	na	1.5E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
1,3-Dichloropropene [C]	0	--	--	na	2.1E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Dieldrin [C]	0	2.4E-01	5.6E-02	na	5.4E-04	2.4E-01	5.7E-02	na	#VALUE!	--	--	--	--	--	--	--	--	2.4E-01	5.7E-02	na	#VALUE!
Diethyl Phthalate	0	--	--	na	4.4E+04	--	--	na	6.8E+04	--	--	--	--	--	--	--	--	--	--	na	6.8E+04
2,4-Dimethylphenol	0	--	--	na	8.5E+02	--	--	na	1.3E+03	--	--	--	--	--	--	--	--	--	--	na	1.3E+03
Dimethyl Phthalate	0	--	--	na	1.1E+06	--	--	na	1.7E+06	--	--	--	--	--	--	--	--	--	--	na	1.7E+06
Di-n-Butyl Phthalate	0	--	--	na	4.5E+03	--	--	na	6.9E+03	--	--	--	--	--	--	--	--	--	--	na	6.9E+03
2,4 Dinitrophenol	0	--	--	na	5.3E+03	--	--	na	8.1E+03	--	--	--	--	--	--	--	--	--	--	na	8.1E+03
2-Methyl-4,6-Dinitrophenol	0	--	--	na	2.8E+02	--	--	na	4.3E+02	--	--	--	--	--	--	--	--	--	--	na	4.3E+02
2,4-Dinitrotoluene [C]	0	--	--	na	3.4E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Dioxin 2,3,7,8-tetrachlorodibenzo-p-dioxin	0	--	--	na	5.1E-08	--	--	na	7.8E-08	--	--	--	--	--	--	--	--	--	--	na	7.8E-08
1,2-Diphenylhydrazine[C]	0	--	--	na	2.0E+00	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	--	--	na	#VALUE!
Alpha-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.7E-02	na	1.4E+02	--	--	--	--	--	--	--	--	2.2E-01	5.7E-02	na	1.4E+02
Beta-Endosulfan	0	2.2E-01	5.6E-02	na	8.9E+01	2.2E-01	5.7E-02	na	1.4E+02	--	--	--	--	--	--	--	--	2.2E-01	5.7E-02	na	1.4E+02
Alpha + Beta Endosulfan	0	2.2E-01	5.6E-02	--	--	2.2E-01	5.7E-02	--	--	--	--	--	--	--	--	--	--	2.2E-01	5.7E-02	--	--
Endosulfan Sulfate	0	--	--	na	8.9E+01	--	--	na	1.4E+02	--	--	--	--	--	--	--	--	--	--	na	1.4E+02
Endrin	0	8.6E-02	3.6E-02	na	6.0E-02	8.6E-02	3.7E-02	na	9.2E-02	--	--	--	--	--	--	--	--	8.6E-02	3.7E-02	na	9.2E-02
Endrin Aldehyde	0	--	--	na	3.0E-01	--	--	na	4.6E-01	--	--	--	--	--	--	--	--	--	--	na	4.6E-01

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Ethylbenzene	0	--	--	na	2.1E+03	--	--	na	3.2E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**3.2E+03**
Fluoranthene	0	--	--	na	1.4E+02	--	--	na	2.1E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.1E+02**
Fluorene	0	--	--	na	5.3E+03	--	--	na	8.1E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**8.1E+03**
Foaming Agents	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Guthion	0	--	1.0E-02	na	--	--	1.0E-02	na	--	--	--	--	--	--	--	--	--	**--**	**1.0E-02**	**na**	**--**
Heptachlor [c]	0	5.2E-01	3.8E-03	na	7.9E-04	5.2E-01	3.9E-03	na	#VALUE!	--	--	--	--	--	--	--	--	**5.2E-01**	**3.9E-03**	**na**	**#VALUE!**
Heptachlor Epoxide[c]	0	5.2E-01	3.8E-03	na	3.9E-04	5.2E-01	3.9E-03	na	#VALUE!	--	--	--	--	--	--	--	--	**5.2E-01**	**3.9E-03**	**na**	**#VALUE!**
Hexachlorobenzene[c]	0	--	--	na	2.9E-03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Hexachlorobutadiene[c]	0	--	--	na	1.8E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Hexachlorocyclohexane Alpha-BHC[c]	0	--	--	na	4.9E-02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Hexachlorocyclohexane Beta-BHC[c]	0	--	--	na	1.7E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Hexachlorocyclohexane Gamma-BHC[c] (Lindane)	0	9.5E-01	na	na	1.8E+00	9.5E-01	--	na	#VALUE!	--	--	--	--	--	--	--	--	**9.5E-01**	**--**	**na**	**#VALUE!**
Hexachlorocyclopentadiene	0	--	--	na	1.1E+03	--	--	na	1.7E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.7E+03**
Hexachloroethane[c]	0	--	--	na	3.3E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Hydrogen Sulfide	0	--	2.0E+00	na	--	--	2.0E+00	na	--	--	--	--	--	--	--	--	--	**--**	**2.0E+00**	**na**	**--**
Indeno (1,2,3-cd) pyrene [c]	0	--	--	na	1.8E-01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Iron	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Isophorone[c]	0	--	--	na	9.6E+03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Kepone	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	**--**	**0.0E+00**	**na**	**--**
Lead	0	2.0E+01	2.3E+00	na	--	2.0E+01	2.3E+00	na	--	--	--	--	--	--	--	--	--	**2.0E+01**	**2.3E+00**	**na**	**--**
Malathion	0	--	1.0E-01	na	--	--	1.0E-01	na	--	--	--	--	--	--	--	--	--	**--**	**1.0E-01**	**na**	**--**
Manganese	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Mercury	0	1.4E+00	7.7E-01	- -	- -	1.4E+00	7.8E-01	- -	- -	--	--	--	--	--	--	--	--	**1.4E+00**	**7.8E-01**	**- -**	**- -**
Methyl Bromide	0	--	--	na	1.5E+03	--	--	na	2.3E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**2.3E+03**
Methylene Chloride [c]	0	--	--	na	5.9E+03	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Methoxychlor	0	--	3.0E-02	na	--	--	3.0E-02	na	--	--	--	--	--	--	--	--	--	**--**	**3.0E-02**	**na**	**--**
Mirex	0	--	0.0E+00	na	--	--	0.0E+00	na	--	--	--	--	--	--	--	--	--	**--**	**0.0E+00**	**na**	**--**
Nickel	0	5.6E+01	6.3E+00	na	4.6E+03	5.7E+01	6.4E+00	na	7.1E+03	--	--	--	--	--	--	--	--	**5.7E+01**	**6.4E+00**	**na**	**7.1E+03**
Nitrate (as N)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Nitrobenzene	0	--	--	na	6.9E+02	--	--	na	1.1E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.1E+03**
N-Nitrosodimethylamine[c]	0	--	--	na	3.0E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
N-Nitrosodiphenylamine[c]	0	--	--	na	6.0E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
N-Nitrosodi-n-propylamine[c]	0	--	--	na	5.1E+00	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Nonylphenol	0	2.8E+01	6.6E+00	--	--	2.8E+01	6.7E+00	na	--	--	--	--	--	--	--	--	--	**2.8E+01**	**6.7E+00**	**na**	**--**
Parathion	0	6.5E-02	1.3E-02	na	--	6.5E-02	1.3E-02	na	--	--	--	--	--	--	--	--	--	**6.5E-02**	**1.3E-02**	**na**	**--**
PCB Total[c]	0	--	1.4E-02	na	6.4E-04	--	1.4E-02	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**1.4E-02**	**na**	**#VALUE!**
Pentachlorophenol [c]	0	9.4E+00	6.9E+00	na	3.0E+01	9.4E+00	7.0E+00	na	#VALUE!	--	--	--	--	--	--	--	--	**9.4E+00**	**7.0E+00**	**na**	**#VALUE!**
Phenol	0	--	--	na	8.6E+05	--	--	na	1.3E+06	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.3E+06**
Pyrene	0	--	--	na	4.0E+03	--	--	na	6.1E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**6.1E+03**
Radionuclides	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Gross Alpha Activity (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Beta and Photon Activity (mrem/yr)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Radium 226 + 228 (pCi/L)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Uranium (ug/l)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**

Parameter	Background	Water Quality Criteria				Wasteload Allocations				Antidegradation Baseline				Antidegradation Allocations				Most Limiting Allocations			
(ug/l unless noted)	Conc.	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	Acute	Chronic	HH (PWS)	HH	**Acute**	**Chronic**	**HH (PWS)**	**HH**
Selenium, Total Recoverable	0	2.0E+01	5.0E+00	na	4.2E+03	2.0E+01	5.1E+00	na	6.4E+03	--	--	--	--	--	--	--	--	**2.0E+01**	**5.1E+00**	**na**	**6.4E+03**
Silver	0	3.2E-01	--	na	--	3.2E-01	--	na	--	--	--	--	--	--	--	--	--	**3.2E-01**	**--**	**na**	**--**
Sulfate	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
1,1,2,2-Tetrachloroethane[c]	0	--	--	na	4.0E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Tetrachloroethylene[c]	0	--	--	na	3.3E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Thallium	0	--	--	na	4.7E-01	--	--	na	7.2E-01	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**7.2E-01**
Toluene	0	--	--	na	6.0E+03	--	--	na	9.2E+03	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**9.2E+03**
Total dissolved solids	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Toxaphene [c]	0	7.3E-01	2.0E-04	na	2.8E-03	7.3E-01	2.0E-04	na	#VALUE!	--	--	--	--	--	--	--	--	**7.3E-01**	**2.0E-04**	**na**	**#VALUE!**
Tributyltin	0	4.6E-01	7.2E-02	na	--	4.6E-01	7.3E-02	na	--	--	--	--	--	--	--	--	--	**4.6E-01**	**7.3E-02**	**na**	**--**
1,2,4-Trichlorobenzene	0	--	--	na	7.0E+01	--	--	na	1.1E+02	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**1.1E+02**
1,1,2-Trichloroethane[c]	0	--	--	na	1.6E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Trichloroethylene [c]	0	--	--	na	3.0E+02	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
2,4,6-Trichlorophenol [c]	0	--	--	na	2.4E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	0	--	--	na	--	--	--	na	--	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**--**
Vinyl Chloride[c]	0	--	--	na	2.4E+01	--	--	na	#VALUE!	--	--	--	--	--	--	--	--	**--**	**--**	**na**	**#VALUE!**
Zinc	0	3.6E+01	3.6E+01	na	2.6E+04	3.6E+01	3.7E+01	na	4.0E+04	--	--	--	--	--	--	--	--	**3.6E+01**	**3.7E+01**	**na**	**4.0E+04**

Notes:

1. All concentrations expressed as micrograms/liter (ug/l), unless noted otherwise
2. Discharge flow is highest monthly average or Form 2C maximum for Industries and design flow for Municipals
3. Metals measured as Dissolved, unless specified otherwise
4. "C" indicates a carcinogenic parameter
5. Regular WLAs are mass balances (minus background concentration) using the % of stream flow entered above under Mixing Information. Antidegradation WLAs are based upon a complete mix.
6. Antideg. Baseline = (0.25(WQC - background conc.) + background conc.) for acute and chronic
   = (0.1(WQC - background conc.) + background conc.) for human health
7. WLAs established at the following stream flows: 1Q10 for Acute, 30Q10 for Chronic Ammonia, 7Q10 for Other Chronic, 30Q5 for Non-carcinogens and Harmonic Mean for Carcinogens. To apply mixing ratios from a model set the stream flow equal to (mixing ratio - 1), effluent flow equal to 1 and 100% mix.

Metal	Target Value (SSTV)
Antimony	9.8E+02
Arsenic	9.1E+01
Barium	na
Cadmium	2.3E-01
Chromium III	1.4E+01
Chromium VI	6.4E+00
Copper	1.5E+00
Iron	na
Lead	1.4E+00
Manganese	na
Mercury	4.7E-01
Nickel	3.8E+00
Selenium	3.0E+00
Silver	1.3E-01
Zinc	1.5E+01

Note: do not use QL's lower than the minimum QL's provided in agency guidance

Hardness 22 mg/L
No New hardness data submitted with current application. 3/26/14

Mixing Zone Predictions for Franklin WWTP

Effluent Flow = 2.0 MGD
Stream 7Q10 = 0.028 MGD
Stream 30Q10 = 1.07 MGD
Stream 1Q10 = 0.0058 MGD
Stream slope = 1 ft/ft
Stream width = 30 ft
Bottom scale = 3
Channel scale = 1

Mixing Zone Predictions @ 7Q10

Depth = .0541 ft
Length = 9742.55 ft
Velocity = 1.9335 ft/sec
Residence Time = .0583 days

Recommendation:

A complete mix assumption is appropriate for this situation and the entire 7Q10 may be used.

Mixing Zone Predictions @ 30Q10

Depth = .0694 ft
Length = 7909.87 ft
Velocity = 2.2813 ft/sec
Residence Time = .0401 days

Recommendation:

A complete mix assumption is appropriate for this situation and the entire 30Q10 may be used.

Mixing Zone Predictions @ 1Q10

Depth = .0538 ft
Length = 9796.51 ft
Velocity = 1.925 ft/sec
Residence Time = 1.4136 hours

Recommendation:

A complete mix assumption is appropriate for this situation providing no more than 70.74% of the 1Q10 is used.

Permit No	Outfall No	ameter Descrip	CONCMIN	CONCMAX	Monitoring Start Date	Monitoring End Date
VA0023922	001	PH		7.59	01-May-2004	31 -2004
VA0023922	001	PH	6.66	7.63	01-Jun-2004	30-Jun-2004
VA0023922	001	PH	6.54	7.53	01-Jul-2004	31-Jul-2004
VA0023922	001	PH	6.34	7.41	01-Aug-2004	31-Aug-2004
VA0023922	001	PH	6.41	7.2	01-Sep-2004	30-Sep-2004
VA0023922	001	PH	6.4	6.9	01-Oct-2004	31-Oct-2004
VA0023922	001	PH	6.3	7.6	01-Nov-2004	30-Nov-2004
VA0023922	001	PH	6.42	7.56	01-Dec-2004	31-Dec-2004
VA0023922	001	PH	6.43	7.09	01-Jan-2005	31-Jan-2005
VA0023922	001	PH	6.35	7.02	01-Feb-2005	28-Feb-2005
VA0023922	001	PH	6.43	7.25	01-Mar-2005	31-Mar-2005
VA0023922	001	PH	6.59	7.45	01-Apr-2005	30-Apr-2005
VA0023922	001	PH	6.95	7.63	01-May-2005	31-May-2005
VA0023922	001	PH	6.79	7.55	01-Jun-2005	30-Jun-2005
VA0023922	001	PH	7.4	7.8	01-Jul-2005	31-Jul-2005
VA0023922	001	PH	7.14	7.64	01-Aug-2005	31-Aug-2005
VA0023922	001	PH	7.03	7.62	01-Sep-2005	30-Sep-2005
VA0023922	001	PH	6.93	7.81	01-Oct-2005	31-Oct-2005
VA0023922	001	PH	6.69	7.6	01-Nov-2005	30-Nov-2005
VA0023922	001	PH	6.4	7.4	01-Dec-2005	31-Dec-2005
VA0023922	001	PH	6.51	7.02	01-Jan-2006	31-Jan-2006
VA0023922	001	PH	6.45	6.88	01-Feb-2006	28-Feb-2006
VA0023922	001	PH	6.58	7.08	01-Mar-2006	31-Mar-2006
VA0023922	001	PH	6.64	7.02	01-Apr-2006	30-Apr-2006
VA0023922	001	PH	6.48	7.56	01-May-2006	31-May-2006
VA0023922	001	PH	6.51	7.08	01-Jun-2006	30-Jun-2006
VA0023922	001	PH	6.76	7.15	01-Jul-2006	31-Jul-2006
VA0023922	001	PH	6.87	7.27	01-Aug-2006	31-Aug-2006
VA0023922	001	PH	6.74	7.14	01-Sep-2006	30-Sep-2006
VA0023922	001	PH	6.78	7.37	01-Oct-2006	31-Oct-2006
VA0023922	001	PH	6.61	7.3	01-Nov-2006	30-Nov-2006
VA0023922	001	PH	6.01	7.23	01-Dec-2006	31-Dec-2006
VA0023922	001	PH	6.7	7.3	01-Jan-2007	31-Jan-2007
VA0023922	001	PH	6.87	7.6	01-Feb-2007	28-Feb-2007
VA0023922	001	PH	6.8	7.6	01-Mar-2007	31-Mar-2007
VA0023922	001	PH	6.9	7.6	01-Apr-2007	30-Apr-2007
VA0023922	001	PH	6.8	7.4	01-May-2007	31-May-2007
VA0023922	001	PH	7	7.6	01-Jun-2007	30-Jun-2007
VA0023922	001	PH	7.0	7.5	01-Jul-2007	31-Jul-2007
VA0023922	001	PH	6.8	7.5	01-Aug-2007	31-Aug-2007
VA0023922	001	PH	7.02	7.45	01-Sep-2007	30-Sep-2007
VA0023922	001	PH	7.0	7.5	01-Oct-2007	31-Oct-2007
VA0023922	001	PH	6.8	7.3	01-Nov-2007	30-Nov-2007
VA0023922	001	PH	6.7	7.4	01-Dec-2007	31-Dec-2007
VA0023922	001	PH	6.5	7.3	01-Jan-2008	31-Jan-2008
VA0023922	001	PH	6.85	7.3	01-Feb-2008	29-Feb-2008
VA0023922	001	PH	6.97	7.36	01-Mar-2008	31-Mar-2008
VA0023922	001	PH	6.83	8.18	01-Apr-2008	30-Apr-2008
VA0023922	001	PH	7.00	7.31	01-May-2008	31-May-2008
VA0023922	001	PH	7.18	7.55	01-Jun-2008	30-Jun-2008
VA0023922	001	PH	6.94	7.3	01-Jul-2008	31-Jul-2008
VA0023922	001	PH	7.02	7.57	01-Aug-2008	31-Aug-2008
VA0023922	001	PH	6.84	7.51	01-Sep-2008	30-Sep-2008
VA0023922	001	PH	7.03	7.36	01-Oct-2008	31-Oct-2008
VA0023922	001	PH	6.93	7.35	01-Nov-2008	30-Nov-2008
VA0023922	001	PH	6.75	7.2	01-Dec-2008	31-Dec-2008
VA0023922	001	PH	6.9	7.2	01-Jan-2009	31-Jan-2009
VA0023922	001	PH			01-Feb-2009	28-Feb-2009

7.08 10th percentile
7.624 90th percentile

pH
facility data
used for
WLA Analysis

						46570	01040	01042	01075	01077	01090	01092
Sta Id	Collection Date Time	Temp Celcius	Salinity	Field Ph	Do Probe	HARDNESS, CA M	COPPER, D	COPPER, T	SILVER, DIS	SILVER, T	ZINC, DIS	ZINC, TOTAL (UG/L AS ZN)
5ABLW013.76	06/06/2006 09:55	NULL	NULL	NULL	NULL	38.000	.800	3.200	.100	.100	8.800	8.600

Blackwater River Data
Received via email from
S. Cioccia 3/12/09
[initials]

Sta Id	Collection Date Time	Field Ph	Do Probe	Salinity	Temp Celcius
5ABLW013.16	15/05/2008	6.00	5.40	.01	17.20
5ABLW013.16	24/05/2007	6.10	5.20	.00	20.00
5ABLW013.16	20/03/2008	6.10	7.10	.02	14.40
5ABLW013.16	24/01/2008	6.30	11.70	.06	3.90
5ABLW013.16	24/07/2008	6.40	2.00	.06	27.80
5ABLW013.16	21/09/2006	6.40	4.10	.02	20.60
5ABLW013.16	19/11/2008	6.40	5.30	.05	9.70
5ABLW013.16	07/11/2006	6.40	7.00	.01	9.70
5ABLW013.16	27/07/2006	6.50	2.00	.04	26.70
5ABLW013.16	26/01/2006	6.57	11.29	.03	6.67
5ABLW013.16	20/09/2007	6.60	3.20	.11	22.60
5ABLW013.16	29/11/2007	6.70	5.10	.10	11.70
5ABLW013.16	24/10/2006	6.70	5.50	.03	12.90
5ABLW013.16	18/10/2006	6.70	5.90	.03	15.30
5ABLW013.16	27/03/2007	6.70	7.60	.02	16.80
5ABLW013.16	25/05/2006	6.80	6.20	.02	18.50
5ABLW013.16	25/01/2007	6.80	12.20	.02	3.80
5ABLW013.16	18/09/2008	6.90	2.60	.09	24.60
5ABLW013.16	26/07/2007	6.90	3.10	.08	27.20
5ABLW013.16	30/03/2006	7.10	11.20	.04	11.70
	90th percentile	6.9	11.331	0.091	26.75
	10th percentile	6.1			

Calculations performed with excel 3/13/09 DQA

Conversion of cfs to MGD

1Q10 $.009 \text{ cfs} \times \frac{7.48 \text{ gallons}}{1 \text{ cf}} \times \frac{86400 \text{ sec}}{\text{day}} = 5816.448 \text{ gallons/day}$

Convert to MGD ÷ by 1,000,000 = 0.0058 MGD

7Q10 $0.044 \text{ cfs} \times \frac{7.48 \text{ gallons}}{1 \text{ cf}} \times \frac{86400 \text{ sec}}{\text{day}} = 28435.97 \text{ gal/day}$

Convert to MGD ÷ by 1,000,000 = 0.028 MGD

30Q5 $1.658 \text{ cfs} \times \frac{7.48 \text{ gal}}{1 \text{ cf}} \times \frac{86400 \text{ sec}}{\text{day}} = 1071518.98 \text{ gal/day}$

Convert to MGD ÷ by 1,000,000 = 1.07 MGD

Smithson,Robert

From: Martin,Charles
Sent: Friday, March 12, 2004 10:02 AM
To: Smithson,Robert; McConathy,James
Cc: Powell,Gene; Schneider,Jutta
Subject: RE: City of Franklin Flow Frequencies (1992)

Robert, I do not know of any reason to re-calculate the flow frequencies. The 1992 calculations were based on a rather good period of record and should not have a significant change with the addition of more data. Also, I think the Zuni gage has subsequently been taken out of service.

-----Original Message-----
From: Smithson,Robert
Sent: Friday, March 12, 2004 9:33 AM
To: Martin,Charles; McConathy,James
Subject: City of Franklin Flow Frequencies (1992)

Morning Charlie!

You provided TRO with flow data (via memo) back in April of '92. We have been using it since then to base limits, etc. Franklin WWTP is up again for reissuance. Can you think of any reason we should revisit these frequencies? Logic tells me that flow data shouldn't change unless there was an error or models have improved.

If you need me to fax your 1992 memo/data we have been using, respond accordingly. *If you decide* to revisit the data, we need the results by the end of next week, if possible.

As usual, thanks for your help.

Robert E. Smithson
Environmental Engineer Senior
DEQ, Tidewater Regional Office
(757)-518-2106
resmithson@deq.state.va.us

This info was pulled from the last f.s. The data base maintained by DEQ shows no change in stream flow data.

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Water Quality Assessments
629 East Main Street P.O. Box 10009 Richmond, Virginia 23219

SUBJECT: Flow Frequency Determination
City of Franklin STP – #VA0023922

TO: Bob Smithson, TRO

FROM: Paul E. Herman, P.E., WQAP

DATE: January 12, 1999

COPIES: Ron Gregory, Charles Martin, File

During the development of the subject VPDES permit, please use the freshwater inflow-flow frequencies presented in Charles Martin's memo to you dated April 1, 1992. As indicated in that memo, the Blackwater River is tidal at the City of Franklin's STP outfall. According to the USGS, flows at the gage below 10.0 cfs are influenced by tides. Charles used the Blackwater River at Zuni, VA #02049500 to estimate the freshwater inflow to the Blackwater estuary. The Zuni gage was discontinued in 1988 so updated flow frequencies are not possible.

The data presented in Charles Martin's April 1, 1992 memo to you represent the most up-to-date freshwater inflow-flow data available for the tidal reach of the Blackwater River. If you have any questions concerning this analysis, please let me know.

M E M O R A N D U M

VIRGINIA WATER CONTROL BOARD
OFFICE OF WATER QUALITY ASSESSMENTS
4900 Cox Road Glen Allen, VA 23060

SUBJECT: Flow Frequencies for Blackwater River - City of Franklin STP - VA0023922

TO: Bob Smithson, TRO

FROM: Charles Martin, WQA CM

DATE: April 1, 1992

COPIES: Dale Phillips, Paul Herman, Chuck Turner, Mark Richards

Inflow of Blackwater River
at City of Franklin's STP

1Q10 = 0.009 cfs × .646 = .0058
7Q10 = 0.044 cfs × .646 = .0284
30Q5 = 1.658 cfs × .646 = 1.071

The City of Franklin STP discharges into a section of the Blackwater River which is tidal at flows below 20 cfs. Since the River at the discharge is not free flowing at low flows, low flow frequencies are indeterminate at the discharge point. What has been calculated is the fresh water inflow to the discharge point from the 672 square miles of watershed upstream of the outfall.

The Blackwater gage at Franklin (#2949500) should not be used to determine low flow frequencies because of the tidal effects.

The Zuni gage (#2049500) with a drainage area of 456 square miles was used to estimate the inflow at the discharge. This flow recording station has daily flow values of zero. For water years 1944, 1954, and 1983 the 7 day averages were zero as shown on the 7-day attachment. The Gumbel graphical method (attached) was used to determine the flow values instead of the Log Pearson Type III method we normally use. The Gumbel method is used on flow stations having daily flow values of zero.

ATTACHMENT 7

SPECIAL CONDITIONS RATIONALE

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE

Name of Condition:

B. Additional Total Residual Chlorine (TRC) Limitations and Monitoring Requirements

Rationale: Required by Water Quality Standards, 9VAC 25-260-170, Fecal coliform bacteria; other waters. Also, 40 CFR 122.41(e) requires the permittee, at all times, to properly operate and maintain all facilities and systems of treatment in order to comply with the permit. This ensures proper operation of chlorination equipment to maintain adequate disinfection.

C. OTHER REQUIREMENTS OR SPECIAL CONDITIONS

1.a.. Sludge Reopener

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-220 C., and 40 CFR 122.44 (c)(4), which note that all permits for domestic sewage treatment plants (including sludge-only facilities) include any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act.

1.b. Water Quality Standards Reopener

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-220 D requires effluent limitations to be established which will contribute to the attainment or maintenance of water quality criteria.

1.c. Nutrient Enriched Waters Reopener

Rationale: The Policy for Nutrient Enriched Waters, 9 VAC 25-40 -10 allows reopening of permits for discharges into waters designated as nutrient enriched if total phosphorus and total nitrogen in a discharge potentially exceed specified concentrations. The policy also anticipates that future total phosphorus and total nitrogen limits may be needed.

1.d. Total Maximum Daily Load (TMDL) Reopener

Rationale: For specified waters, Section 303(d) of the Clean Water Act requires the development of total maximum daily loads necessary to achieve the applicable water quality standards. The TMDL must take into account seasonal variations and a margin of safety. In addition, Section 62.1-44.19:7 of the State Water Control Law requires the development and implementation of plans to address impaired waters, including TMDLs. This condition allows for the permit to be either modified or, alternatively, revoked and reissued to incorporate the requirements of a TMDL once it is developed. In addition, the reopener recognizes that, in according to Section 402(o)(1) of the Clean Water Act, limits and/or conditions may be either more or less stringent than those contained in this permit. Specifically, they can be relaxed if they are the result of a TMDL, basin plan or other wasteload allocation prepared under Section 303 of the Act.

2. Licensed Operator Requirement

Rationale: The Permit Regulation, 9 VAC 25-31-200 D and Code of Virginia 54.1-2300 et. seq., Rules and Regulations for Waterworks and Wastewater Works Operators (18 VAC 160-20-10 et seq.) requires licensure of operators.

3. Reliability Class

Rationale: Required by Sewage Collection and Treatment Regulations, 12 VAC 5-581-20 and 120 for all municipal facilities. The reliability class has been

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE
continued

changed from Class II to Class L based upon comments received from VDH in 2008, 2009 and again in 2014. VDH comments are included with the fact sheet (attachment 13-other documents)

4. CTC, CTO and O & M Manual Requirements

Rationale: Required by the State Water Control Law, Section 62.1-44.19; the Sewage Collection and Treatment Regulations (12 VAC 5-581 et seq); Section 401 of the Clean Water Act; 40 CFR 122.41(e); and the VPDES Permit Regulation (9 VAC-25-31-190E).

5. 95% Design Capacity

Rationale: Required by the VPDES Permit Regulation, 9 VAC 25-31-200 B.2. for all POTW and PVOTW permits. Best professional judgement is used to apply this condition to other (private) municipal treatment facilities.

6. Quantification Levels Under Part I.A.

Rationale: States are authorized to establish monitoring methods and procedures to compile and analyze data on water quality, as per 40 CFR part 130, Water Quality Planning and Management, subpart 130.4. Section b. of the special condition defines QL and is included per BPJ to clarify the difference between QL and MDL.

7. Compliance Reporting Under Part I.A

Rationale: Defines reporting requirements for toxic parameters and some conventional parameters with quantification levels to ensure consistent, accurate reporting on submitted reports.

8. Materials Handling and Storage

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-50 A., prohibits the discharge of any wastes into State waters unless authorized by permit. The State Water Control Law, Sec. 62.1-44.18:2, authorizes the Board to prohibit any waste discharge which would threaten public health or safety, interfere with or be incompatible with treatment works or water use. Section 301 of the Clean Water Act prohibits the discharge of any pollutant unless it complies with specific sections of the Act.

9. Indirect Dischargers

Rationale: Required by VPDES Permit Regulation, 9 VAC 25-31-200 B.1. for POTWs and PVOTWs that receive waste from someone other than the owner of the treatment works.

10. Sludge Management Plan

Rationale: The VPDES Permit Regulation, 9 VAC 25-31-420, and 40 CFR 503.1 specify the purpose and applicability for sludge management plans. The VPDES Permit Regulation, 9 VAC 25-31-100 J.4., also sets forth certain detailed information which must be included in a sludge management plan. The VPDES sewage sludge permit application form and its attachments constitute the sludge management plan and will be considered for approval with the VPDES permit. In addition, the Biosolids Use Regulation, 12 VAC 5-585-330 and 340, specifies the general purpose and control requirements for an O&M manual in

VPDES PERMIT PROGRAM
LIST OF SPECIAL CONDITIONS RATIONALE
continued

order to facilitate proper O&M of the facilities to meet the requirements of the regulation.

D. PRETREATMENT

Rationale: The permit regulation, 9 VAC 25-31-10 et seq., Part VII, establishes the legal requirements for State, local government and industry to implement National Pretreatment Standards. The Pretreatment Standards are implemented to prevent POTW plant pass through, interference, violation of water quality standards or contamination of sewage sludge. The regulation requires POTWs with a total design flow greater than 5 MGD with significant or categorical industrial input to establish a Pretreatment Program. The regulation also may apply to POTWs with design flows less than 5 MGD if circumstances warrant control of industrial discharges.

E. TOXICS MANAGENENT PROGRAM (TMP)

Rationale: To determine the need for pollutant specific and/or whole effluent toxicity limits as may be required by the VPDES Permit Regulation, 9 VAC 25-31-220 D. and 40 CFR 122.44 (d). See Attachment 9 of this fact sheet for additional justification.

Stormwater is not addressed in the permit due to no exposure (copy of certification received from the facility on 03/14/14)

ATTACHMENT 8

TOXICS MONITORING/TOXICS REDUCTION/ WET LIMIT RATIONALE

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard Virginia Beach, VA 23462

SUBJECT: TMP language for City of Franklin WWTP (VA0023922)

TO: Robert Smithson

FROM: Deanna Austin DDA

DATE: 3/26/14

The City of Franklin WWTP is designed at 2.0 MGD and discharges to the Blackwater River. The plant uses UV for disinfection. The table below shows the data gathered during the current permit term (2009-2014).

DESCRIPT	SPECIES	SAMPLEDT	LC50	SURVIVAL	NOEC	TU	LAB
1st Annual Acute	C.d.	05-Dec-10	100	100		1	JR Reed
1st Annual Chronic	P.p.	05-Dec-10		99	99	1.01	JR Reed
2nd Annual Acute	C.d.	04-Dec-11	100	100		1	JR Reed
2nd Annual Chronic	P.p.	04-Dec-11		99	99	1.01	JR Reed
3rd Annual Acute	C.d.	14-Oct-12	100	100		1	JR Reed
3rd Annual Chronic	P.p.	14-Oct-12		99	99	1.01	JR Reed
4th Annual Acute	C.d.	06-Oct-13	100	100		1	JR Reed
4th Annual Chronic	P.p.	06-Oct-13		99	99	1.01	JR Reed

The facility has had continued compliance with their acute and chronic endpoints, therefore no changes are recommended for reissuance. Because the facility is a municipal major facility, toxicity testing must continue on an annual basis using 2 species.

The following TMP language is recommended for the reissuance of the City of Franklin WWTP permit (VA0023922).

E. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring

a. In accordance with the schedule in E.2.below, the permittee shall conduct annual toxicity tests for the duration of the permit.

The permittee shall collect a 24-hour flow-proportioned composite sample of final effluent from outfalls 001 in accordance with the sampling methodology in Part I.A. of this permit. The composite sample for toxicity testing shall be taken at the same time as the monitoring for the outfall in Part 1.A. of this permit. Annual acute and chronic tests shall be conducted for outfall 001 using:

48 Hour Static Acute test using **Ceriodaphnia dubia**

Chronic 7-day Static Renewal Survival and Growth Test with **Pimephales promelas**

b. The acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for the calculation of a valid LC_{50}. Express the results as TU_a (Acute Toxic Units) by dividing 100/ LC_{50} for reporting.

The chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC50 at 48 hours and the IC25 with the NOEC's in the test report.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

d. If, in the testing according to E.1., any toxicity tests that are invalidated, the tests shall be repeated within the testing period that the original test was taken, or if already past that period, within thirty (30) days of notification.

e. The test dilutions shall be able to determine compliance with the following endpoints:

(1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0

(2) Chronic NOEC of 99% equivalent to a TU_c of 1.01

2. Reporting Schedule

The permittee shall report the results and supply **one** complete copy of the toxicity test reports to the Tidewater Regional Office in accordance with the schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody. All data shall be submitted by the 10th of the month following sampling.

(a)	Conduct first annual acute TMP test using Ceriodaphnia dubia and conduct first annual chronic TMP test using Pimephales promelas for outfall 001	By December 31, 2015
(b)	Submit results of all biological tests	By the 10th of the month following sampling but no later than January 10, 2016
(c)	Conduct subsequent annual acute TMP tests using Ceriodaphnia dubia and subsequent annual chronic TMP tests using Pimephales promelas for outfall 001	By December 31, 2016, 2017, and 2018
(d)	Submit subsequent annual biological tests	By the 10th of the month following sampling but no later than January 10, 2017, 2018 and 2019

ATTACHMENT 9

RECEIVING WATERS INFO./ TIER DETERMINATION/STORET DATA/ STREAM MODELING

303(d) LISTED SEGMENTS

* Discharge location
@ 36° 40' 26", 76° 55' 4"

Planning Permit Review

Date: 2/25/2014

To: Kristie Britt, TRO

Permit Writer: RE Smithson

Facility: City of Franklin WWTP

Permit Number: VA0023922

Issuance, Reissuance or Modification (if Modification describe): reissuance

Permit Expiration Date: 6/22/2014

Waterbody ID (ex: VAT-G15E): VAT-K36R

Topo Name: Franklin 05B

Facility Address:

501 S. Main St., Franklin, VA 23851

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: Blackwater River	
Stream Data Requested?	
Outfall #: 001	**Lat Lon: 36 40'26"; 76 55'4"**
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**
Stream Name (2):	
Stream Data Requested?	
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**
Outfall #:	**Lat Lon:**

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Planning Review:

303 (d): Indicate Outfalls which discharge directly to an impaired (Category 5) stream segment and parameters impaired	
The facility discharges to impaired segment VAT-K36R_BLW04A08. Impairments include DO, E coli and Mercury.	
See Attachment 1.	
Tier Determination	
Tier	The facility discharges to a Tier 1 water. See Attachment 1.
Tier	
Management Plan	
Is the facility Referenced in a Management Plan?	No
Are limits contained in a Management Plan?	No

Review will be completed in 30 days of receipt of request.

Additional Comments:

Maps are in a separate pdf document KNB 2/27/14

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

2012 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

Chowan River and Dismal Swamp Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
K30R-01-DO	Darden Mill Run						
Aquatic Life	Oxygen, Dissolved	5C			10.37	2002	2014
K30R-01-PH	Darden Mill Run						
Aquatic Life	pH	5C			10.37	2004	2016
K30R-02-BAC	Nottoway River - Upper						
Recreation	Escherichia coli	5A			0.47	2008	2020
K30R-03-BEN	Nottoway River - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			15.36	2012	2022
K31R-04-BEN	Warwick Swamp						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			2.93	2010	2022
K32R-01-BEN	Blackwater River - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			1.03	2008	2020
K32R-13-HG	Blackwater River Basin						
Fish Consumption	Mercury in Fish Tissue	5A			33.64	2004	2016
	Mercury in Fish Tissue	5A			25.38	2006	2018
	Mercury in Fish Tissue	5A			528.51	2008	2018
	Mercury in Fish Tissue	5A			282.27	2008	2020
	Mercury in Fish Tissue	5A			214.74	2010	2022
	Mercury in Fish Tissue	5A			1.58	2010	2020
	Mercury in Fish Tissue	5A			3.89	2012	2016
K32R-18-BEN	Blackwater River, UT						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			3.13	2008	2020
K33R-02-BAC	Blackwater River - Upper						
Recreation	Escherichia coli	5A			18.94	2008	2020
	Escherichia coli	5A			0.91	2012	2022
K33R-02-BEN	Blackwater River - Upper						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			18.94	2008	2020
K33R-03-BEN	Blackwater River - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			4.14	2008	2020
	Benthic-Macroinvertebrate Bioassessments	5A			5.03	2012	2020
K34R-01-PH	Mill Swamp						
Aquatic Life	pH	5C			8.36	2010	2022
K35L-01-DO	Airfield Pond						
Aquatic Life	Oxygen, Dissolved	5C		120.07		2008	2020
K35L-01-HG	Airfield Pond						
Fish Consumption	Mercury in Fish Tissue	5A		120.07		2010	2022
K35R-02-BAC	Seacock Swamp - Lower						
Recreation	Fecal Coliform	5A			2.63	2004	2016

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

2012 Impaired Waters - 303(d) List

Category 5 - Waters needing Total Maximum Daily Load Study

Chowan River and Dismal Swamp Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)	Initial List Date	TMDL Dev. Date
K35R-02-BEN	Seacock Swamp - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			2.63	2008	2020
K35R-03-BAC	UT Seacock Swamp						
Recreation	Fecal Coliform	5A			1.03	2004	2016
K35R-03-DO	UT Seacock Swamp						
Aquatic Life	Oxygen, Dissolved	5C			1.03	2004	2016
K35R-04-BAC	UT Airfield Pond - Lower						
Recreation	Escherichia coli	5A			0.71	2004	2016
K35R-04-DO	UT Airfield Pond - Lower						
Aquatic Life	Oxygen, Dissolved	5C			0.71	2004	2016
K35R-05-BAC	UT Airfield Pond - Upper						
Recreation	Escherichia coli	5A			0.68	2004	2016
K35R-05-DO	UT Airfield Pond - Upper						
Aquatic Life	Oxygen, Dissolved	5C			0.68	2004	2016
K35R-06-BAC	Seacock Swamp - Upper						
Recreation	Fecal Coliform	5A			0.80	2006	2018
	Escherichia coli	5A			2.45	2012	2022
K35R-07-DO	Brantley Swamp - Lower						
Aquatic Life	Oxygen, Dissolved	5C			3.52	2004	2016
K35R-08-BEN	Round Hill Swamp						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			0.62	2008	2020
K36R-02-BAC	Blackwater River - Lower Middle						
Recreation	Escherichia coli	5A			6.77	2006	2018
K36R-02-BEN	Black Creek						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			4.16	2008	2020
K36R-03-BAC	Black Creek - Upper						
Recreation	Escherichia coli	5A			1.23	2010	2022
K36R-04-BAC	Cypress Swamp						
Recreation	Escherichia coli	5A			4.90	2012	2024
K36R-04-BEN	Unsegmented Tributary to Blackwater						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			2.69	2008	2020
K36R-05-BEN	Blackwater River - Upper						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			2.41	2012	2024
K36R-06-BEN	Blackwater River - Lower						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			4.36	2012	2024
K38R-01-BEN	Somerton Creek						
Aquatic Life	Benthic-Macroinvertebrate Bioassessments	5A			9.09	2006	2018

Appendix 5 - List of Impaired (Category 5) Waters in 2012

Chowan River and Dismal Swamp Basins

Cause Group Code: **K32R-13-HG** **Blackwater River Basin**

Location: Blackwater River and tributaries from its headwaters to the VA-State Line

City / County: Dinwiddie Co, Isle Of Wight Co, Petersburg City, Prince George Co, South Boston City, Southampton Co, Suffolk City, Surry Co, Sussex Co

Use(s): Fish Consumption

Cause(s) /
VA Category: Mercury in Fish Tissue / 5A

During the 2006 cycle, the Blackwater River from Route 31 near Dendron downstream to the Virginia-North Carolina state line was assessed as impaired of the Fish Consumption Use due to a VDH fish consumption advisory for mercury.

During the 2008 cycle, the advisory was expanded on 8/31/2007 to include the Blackwater River to its headwaters, including all of its tributaries. The advisory currently recommends consuming no more than two meals/month of largemouth bass, sunfish species, bowfin, chain pickerel, white catfish, redhorse sucker and longnose gar.

The advisory is based on the results of DEQ's fish tissue monitoring program, which show mercury exceedances at multiple stations throughout the watershed, including 5ABKR003.68, 5ABKR002.33, 5AWKS013.53, 5ASEC005.39, 5ABLW074.66, 5ACPP004.04, 5ACPP007.86, 5AJCH000.73.

Blackwater River Basin **Fish Consumption**		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Mercury in Fish Tissue - Total Impaired Size by Water Type:			#######

Sources:

Atmospheric Deposition - Toxics	Source Unknown

Appendix 5 - List of Impaired (Category 5) Waters in 2012

Chowan River and Dismal Swamp Basins

Cause Group Code: **K36R-02-BAC** **Blackwater River - Lower Middle**

Location: This cause encompasses the lower Blackwater River from RM 13.76 (downstream of Franklin, confluence of UT, parallel to Hayden High School) downstream west of Union Camp Holding Pond.

City / County: Isle Of Wight Co Southampton Co

Use(s): Recreation

Cause(s) /
VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on E.coli data (5/38, 4/30, 6/36, 5/31, 9/37) at DEQ (AQM) stations @ 5ABLW009.14, 5ABLW011.48, 5ABLW012.28, 5ABLW012.96, 5ABLW013.16.

Blackwater River - Lower Middle **Recreation**	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
Escherichia coli - Total Impaired Size by Water Type:			**6.77**

Sources:

Source Unknown

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

2012 List of Naturally Impaired Waters (Category 4C)* No TMDL Needed

Chowan River and Dismal Swamp Basins

Cause Group Code / Impaired Use	Water Name / Cause	Cause Category	Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
K32R-11-DO	XDR - UT to Otterdam Swamp				
Aquatic Life	Oxygen, Dissolved	4C			2.61
K32R-15-DO	Spring Branch, UT (XAW)				
Aquatic Life	Oxygen, Dissolved	4C			1.07
K32R-16-DO	Spring Branch, UT (XAL)				
Aquatic Life	Oxygen, Dissolved	4C			0.72
K33R-02-DO	Blackwater River - Upper, Middle, Lower				
Aquatic Life	Oxygen, Dissolved	4C			23.99
K34R-01-DO	Mill Swamp				
Aquatic Life	Oxygen, Dissolved	4C			8.36
K34R-02-DO	Rattlesnake Swamp				
Aquatic Life	Oxygen, Dissolved	4C			6.09
K35R-01-DO	Seacock Swamp - Upper				
Aquatic Life	Oxygen, Dissolved	4C			0.80
K36R-01-DO	Blackwater - Lower Middle				
Aquatic Life	Oxygen, Dissolved	4C			10.21
K36R-02-DO	Blackwater River - Lower Middle				
Aquatic Life	Oxygen, Dissolved	4C			8.19
K36R-03-DO	Washole Creek				
Aquatic Life	Oxygen, Dissolved	4C			0.64
K37R-01-DO	Buckhorn Creek				
Aquatic Life	Oxygen, Dissolved	4C			1.55
K37R-01-PH	Buckhorn Creek				
Aquatic Life	pH	4C			1.55
K38R-01-DO	Somerton Creek				
Aquatic Life	Oxygen, Dissolved	4C			9.09
K39R-01-DO	Dismal Swamp Canal & Feeder Ditch to Lake Drummond				
Aquatic Life	Oxygen, Dissolved	4C			17.58
K41R-02-DO	Milldam Creek - Lower				
Aquatic Life	Oxygen, Dissolved	4C			2.50
K41R-05-DO	West Neck Creek - Middle				
Aquatic Life	Oxygen, Dissolved	4C			3.59
K42E-01-DO	Nawney Creek - Upper				
Aquatic Life	Oxygen, Dissolved	4C	0.022		

VIRGINIA

Draft 305(b)/303(d)

WATER QUALITY INTEGRATED REPORT

to

CONGRESS and the EPA ADMINISTRATOR

for the

PERIOD

January 1, 2005 to December 31, 2010

DEQ
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

DCR
Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

Richmond, Virginia

March 2012

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Division of Water Permit Coordination
629 E. Main Street Richmond, VA 23240

MEMORANDUM

SUBJECT: Guidance Memo No. 00-2011; Guidance on Preparing VPDES Permit Limits

TO: Regional Directors

FROM: Larry G. Lawson

DATE: August 24, 2000

COPIES: David Paylor, Martin Ferguson, Alan Pollock Jean Gregory, Regional Office Permit Managers, Regional Office Water Permit Managers, Regional Office Compliance and Enforcement Managers, OWPP staff

The purpose of this guidance is to replace/update Guidance Memo No. 93 - 015 "Guidance on Preparing VPDES Permits Based on the Water Quality Standards for Toxics"

This guidance was last updated in 1993. Modifications to the water quality standards (WQS) make it necessary to update the guidance. This guidance replaces all previous guidance on the subjects covered herein. Specifically it updates or replaces the following guidance:

91-002	Use of WQS in the VPDES Permit Program
91-011	Selection of Sample Types for VPDES Monitoring
91-016	Use of Existing WQSA Criteria for Silver and Phenol
92-012	Guidance on Use of WQS for Toxics in VPDES Permits
92-012a	Modification of 92-012
930-15	Guidance on Preparing VPDES Permits Based on the Water Quality Standards for Toxics
93-021	Antidegradation Implementation Guidance
94-008	Metals Monitoring, Monitoring Special Condition TOMP Revisions, & Di-2-Ethylhexyl Phthalate
95-012	pH Limits in the VPDES Permits for Cooling Water Outfalls

Note to Users: This document is provided as guidance and, as such, sets forth standard operating procedures for the agency. However, It does not mandate any particular method nor does it prohibit any particular method for the analysis of data, establishment of a wasteload allocation, or establishment of a permit limit. If alternative proposals are made, such proposals should be reviewed and accepted or denied based on their technical adequacy and compliance with appropriate laws and regulations.

Dale Phillips is the contact person if you or your permit managers have any questions.

Voice: 804-698-4077
Fax: 804-698-4032
E-mail: mdphillips@deq.state.va.us

TMDL Permit Review

Date: 2/25/2014

To: Jennifer Howell, TRO √ JSH 3/3/2014

Permit Writer: RE Smithson

Facility: City of Franklin WWTP.

Permit Number: VA0023922

Issuance, Reissuance or Modification (if Modification describe) : reissuance

Permit Expiration Date: 6/22/2014

Waterbody ID (ex: VAT-G15E): VAT-K36R BLW04A08

Topo Name: Franklin 05B

Facility Address:

501 S. Main St., Franklin, VA 23851

Receiving Stream: Attached are topographic maps showing facility property boundaries and outfall(s) locations for those included in this request.

Stream Name: Blackwater River	
Click here to enter text.	
Outfall #: 001	**Lat Lon:** 36 40'26"; 76 55'4"
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Stream Name (2): Click here to enter text.	
Click here to enter text.	
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.
Outfall #: Click here to enter text.	**Lat Lon:** Click here to enter text.

If greater than 2 receiving streams or 3 outfalls per stream please provide a separate table with outfall listings and Latitude Longitude description.

Is there a design flow change? If yes give the change. Click here to enter text.

TMDL Review:

Is a TMDL IN PROGRESS for the receiving stream? No	
Has a TMDL been APPROVED that includes the receiving stream?	
No. However, a Natural Conditions Report was produced because the waters were suspected of having low DO concentrations due to naturally occurring input, not anthropogenic sources. See Comments below.	
If yes, Include TMDL Name, Pollutant(s) and date of approval:	
Dissolved Oxygen (DO) Assessment for Blackwater Swamp Waters: EPA Approved 4/28/2010	
Is the facility assigned a WLA from the TMDL?	NA
If Yes, what is the WLA?	
NA	

Review will be completed in 30 days of receipt of request.

Additional Comments:

Dissolved oxygen concentrations remain relatively unchanged at and downstream from the City of Franklin WWTP, and statistical analysis (Mann-Whitney U Test) of dissolved oxygen concentrations confirms that there is no statistically significant difference between the data set

at the upstream station (5ABLW016.27) and the downstream VADEQ monitoring stations. Therefore, it follows that anthropogenic sources are not having any impact on the low dissolved oxygen concentrations observed in the river. Upon review of DEQ's Dissolved Oxygen (DO) Assessment for Blackwater Swamp Waters, EPA approves the request to place the DO impairments as a Category 4C in the Integrated Report. DEQ has demonstrated that the DO impairments are occurring naturally, and do not warrant the development of a TMDL. DEQ will request that the impaired segments be formally reclassified as a Class VII Swamp Water in the next triennial review. There are no numeric DO criteria for Class VII waters because DO exceedances are a result of natural conditions and are not due to anthropogenic activities. DO TMDLs are, therefore, not required for Class VII waters.

ATTACHMENT 10

TABLE III(a) AND TABLE III(b) - CHANGE SHEETS

TABLE III(a)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes FROM PREVIOUS PERMIT and give a brief rationale for the changes).

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL
Special condition 4: CTC, CTO and O&M Manual Requirements language was updated	In accordance with current standard wording for municipal facilities	03/14/14
Special condition 6:QL for BOD5 from 5 mg/l	BOD5 QL to 2 mg/l per updates to the 2014 VPDES Permit Manual; DMR's also reflect same change	03/26/14

TABLE III(b)

VPDES PERMIT PROGRAM
Permit Processing Change Sheet

1. Effluent Limits and Monitoring Schedule: (List any changes MADE DURING PERMIT PROCESS and give a brief rationale for the changes).

N/A

OUTFALL NUMBER	PARAMETER CHANGED	MONITORING LIMITS CHANGED FROM / TO	EFFLUENT LIMITS CHANGED FROM / TO	RATIONALE	DATE & INITIAL
001					

OTHER CHANGES FROM:	CHANGED TO:	DATE & INITIAL

ATTACHMENT 12

CHRONOLOGY SHEET

VPDES PERMIT PROGRAM

CHRONOLOGY OF EVENTS

APPLICATION RECEIVED	APPLICATION RETURNED	ADDITIONAL INFO REQUESTED	APPLICATION/ADD INFO DUE BACK IN RO	APPLICATION/ADD. INFO RECEIVED
12/20/13	01/09/14	01/09/14	01/28/14	02/14/14
01/28/14	02/03/14	02/03/14 & 03/10/14		02/14/14 (sludge form) & 03/14/14 (no exposure)

APPLICATION TO VDH: 01/31/14 VDH COMMENTS RECEIVED: 02/07/14

APPLICATION TO OWPS: OWPS COMMENTS RECEIVED:

APPLICATION ADMIN. COMPLETE: 02/14/14 APPLICATION TECH. COMPLETE: 03/14/14

APPLICATION FEE DEPOSITED:

Date	DESCRIPTIVE STATEMENT [CHRONOLOGY OF EVENTS] (Meetings, telephone calls, letters, memos, hearings, etc. affecting permit from application to issuance)
12/20/13	Initial application received
01/09/14	Additional information and better map requested
01/31/14	Revised application sent to VDH/DSS/VMRC for comments
02/07/14	VDH comments received
02/14/14	Revised/corrected sludge form received
02/18/14	Endangered species comments solicited from DCR
02/20/14	Application administratively complete letter went to permittee
02/25/14	Planning & TMDL comments solicited
02/27/14	Planning comments received
03/03/14	VDH comments received
03/10/14	Reminder e-mail sent to DSS again asking for their comments
03/10/14	E-mail sent to permittee about missing "stormwater no exposure" certification form
03/12/14	DCR endangered species comments received
03/14/14	No exposure cerification received-**application technically complete**
03/17/14	Fact sheet revised
03/24/14	DSS COMMENTS RECEIVED FS finalized, draft package assembled for review
3/24/14	ROUTED FOR REVIEW
3/31/14	FS/Permit corrections & routed to CM and planning
4/9/14	RECEIVED Conformance document from planning
4/8/14	DRAFT PACKAGE TO OWNER
4/20/14	FIRST PN run (went to paper 4/17/14)
5/2/14	Owner concurrence
5/7/14	EPA concurrence

ATTACHMENT 13

OTHER DOCUMENTS

Smithson Jr., Robert (DEQ)

From: Smith, Mark [Smith.Mark@epa.gov]
Sent: Wednesday, May 07, 2014 1:51 PM
To: Daub, Elleanore (DEQ); Smithson Jr., Robert (DEQ)
Cc: Trulear, Brian
Subject: FW: VA0023922 City of Franklin WWTP Draft Permit, Fact sheet, application For Review & Comment (5/7/14)

Hello Elleanore and Robert. We received the draft permit for the City of Franklin (VA0023922) on 4/18/14. EPA exercised its discretion in the review of this State-submitted draft permit and has chosen to perform a limited review on the impaired waters requirements. As a result of this limited review of the draft permit, we have no comments related to the impaired waters. Thanks

From: Smithson Jr., Robert (DEQ) [mailto:Robert.SmithsonJr@deq.virginia.gov]
Sent: Friday, April 18, 2014 9:50 AM
To: Smith, Mark; Ford, Nancy
Cc: Daub, Elleanore (DEQ)
Subject: VA0023922 City of Franklin WWTP Draft Permit, Fact sheet, application For Review & Comment

Attached is the FTP site for the referenced draft permit package for your review and comment; it will remain on the site for 30 days. Thanks

http://www.deq.virginia.gov/fileshare/wps/EPA/TRO/VA0023922/

Robert Smithson
DEQ-TRO Water Permits Section
757-518-2106
robert.smithsonjr@deq.virginia.gov

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Friday, April 18, 2014 9:50 AM
To: 'Smith.Mark@epamail.epa.gov'; 'ford.nancy@epamail.epa.gov'
Cc: Daub, Elleanore (DEQ)
Subject: VA0023922 City of Franklin WWTP Draft Permit, Fact sheet, application For Review & Comment

Attached is the FTP site for the referenced draft permit package for your review and comment; it will remain on the site for 30 days. Thanks

http://www.deq.virginia.gov/fileshare/wps/EPA/TRO/VA0023922/

Robert Smithson
DEQ-TRO Water Permits Section
757-518-2106
robert.smithsonjr@deq.virginia.gov

Smithson Jr., Robert (DEQ)

From: Russ Pace [rpace@franklinva.com]
Sent: Friday, May 02, 2014 8:07 AM
To: Smithson Jr., Robert (DEQ)
Cc: Donnie Cagle; Sauer, Mark (DEQ)
Subject: RE: Reissuance of Franklin WWTP Permit-Missing Your Concurrence on Draft Permit

Bob, Staff has reviewed the draft permit package and offers no comments. We offer our concurrence with the proposed permit. Thank you.

From: Smithson Jr., Robert (DEQ) [mailto:Robert.SmithsonJr@deq.virginia.gov]
Sent: Thursday, May 01, 2014 5:07 PM
To: Russ Pace
Cc: Donnie Cagle; Sauer, Mark (DEQ)
Subject: Reissuance of Franklin WWTP Permit-Missing Your Concurrence on Draft Permit

Hi Russ,

We sent this package out to you mid April but have not gotten your concurrence and/or comments. DEQ needs to document your input before moving forward in this process. You can respond by e-mail if you wish. Thanks.

PUBLIC NOTICE: ISSUE DATE: APRIL 21, 2014

DEPARTMENT OF ENVIRONMENTAL QUALITY-WATER DIVISION, P. O. Box 1105, Richmond, Virginia 23218
Telephone: (804) 698-4000

PROPOSAL(S) TO ISSUE/REISSUE/AMEND/TERMINATE ONE OR MORE OF THE FOLLOWING: VA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES), VA PRETREATMENT PROGRAM in a VPDES PERMIT; VA POLLUTION ABATEMENT (VPA) OR VA WATER PROTECTION PERMIT(S) PURSUANT TO U. S. PUBLIC LAW 92-500 AS AMENDED AND SECTION 62.1-44.2 ET SEQ OF THE CODE OF VIRGINIA AS AMENDED.

The municipal, industrial or private facility owners on the attached list have applied for issuance, reissuance or amendment of a permit to either discharge treated wastes into the waters of the Commonwealth of Virginia (VPDES); approve or modify a pretreatment program or parts thereof for facilities that discharge to a POTW that is covered by a VPDES permit; handle waste and wastewater in a manner that does not involve discharging to a sewage treatment works or to state waters (VPA); or withdraw surface water, impound non-agricultural waters or impact surface waters such as by land clearing, dredging, filling, excavating, draining, or ditching in open water, streams, and wetlands (VWP).
On the basis of preliminary review and application of lawful standards and regulations, the Department of Environmental Quality (DEQ) proposes to issue/reissue/amend/terminate the permit(s) subject to certain limitations and special conditions. These proposed determinations are tentative.

PROCEDURES FOR FORMULATION OF FINAL DETERMINATIONS

Persons may comment in writing to the DEQ on the proposed permit within 30 days from the date of newspaper public notice. Comments shall include address and phone number of the writer, and shall contain a complete, concise statement of the factual basis for the comments. Only those comments received within this period will be considered by the DEQ. The DEQ may, upon request or upon its own motion, decide to hold a public hearing if it determines that public response is significant. As of September 1, 1985, the mailing notice will be *informational only* and is considered to be confirmation of newspaper notices and not the official notice for comments.

All pertinent information is on file and may be inspected and arrangements made for copying at the Regional Office having jurisdiction as indicated in the first column of the attached list:

Southwest Regional Office, 355-A Deadmore Street, Abingdon, Virginia 24210, (276) 676-4800.

Blue Ridge Regional Office–Roanoke (WCRO), 3019 Peters Creek Road, Roanoke, Virginia 24019, (540) 562-6700.

Valley Regional Office, 4411 Early Road, P. O. Box 3000, Harrisonburg, Virginia 22801, (540) 574-7800.

Northern Regional Office, 13901 Crown Court, Woodbridge, Virginia 22193, (703) 583-3800.

Piedmont Regional Office, 4949-A Cox Road, Glen Allen, Virginia 23060, (804) 527-5020.

Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, Virginia 23462, (757) 518-2000.

Blue Ridge Regional Office–Lynchburg (SCRO), 7705 Timberlake Road, Lynchburg, Virginia 24502, (434) 582-5120

Following the newspaper notice comment period, the DEQ will make its determination regarding name, the proposed permit. These determinations will then become effective unless the DEQ grants a public hearing. Due notice of any public hearing will be given.

April 21, 2014
DEQ/Public Notice

Blue Ridge Regional Office–Roanoke (WCRO), 3019 Peters Creek Road, Roanoke, Virginia 24019

The purpose of this notice is to seek public comment on a draft permit from the DEQ that will allow the release of treated wastewater into a water body in Giles County, Virginia. Applicant: Town of Rich Creek, P. O. Box 65, Rich Creek, Virginia 24147; Permit No. VPDES VA0080837. Facility: Glen Creek WWTP, 356 Campground Drive, Glen Lyn, Virginia 24093. The applicant proposes to release treated sewage wastewaters from residential areas at a rate of 0.2 million gallons per day into a water body.
The DEQ contact: Lynn Wise, Phone: (540) 562-6787; Email: lynn.wise@deq.virginia.gov; Fax: (540) 562-6725.

The purpose of this notice is to seek public comment on a draft permit from the DEQ that will allow the release of treated wastewater and stormwater into a water body in Danville County, Virginia. Applicant: City of Danville, Danville Utilities, 279 Park Avenue, Danville, Virginia 24541; Permit No. VPDES VA0060593. Facility: Danville – Northside Wastewater Treatment Plant, 229 Northside Drive, Danville, Virginia 24540. The applicant proposes to release treated sewage wastewaters at a rate of 20 million gallons per day and stormwater into a water body.
The DEQ contact: Susan Edwards, Phone: (540) 562-6764; Email: susan.edwards@deq.virginia.gov; Fax: (540) 562-6725.

The purpose of this notice is to seek public comment on a draft permit from the DEQ that will allow the release of treated wastewater into a water body in the City of Lynchburg and Amherst County, Virginia. Applicant: Appalachian Power Company, 1 Riverside Plaza, Columbus, Ohio 43215; Permit No. VPDES VA0087114. Facility: Reusens Hydroelectric Plant, 4200 Hyrdo Street, Lynchburg, Virginia 24503. The applicant proposes to release cooling water at a rate of 0.154 million gallons per day into a water body.
The DEQ contact: Becky France, Phone: (540) 562-6700; Email: becky.france@deq.virginia.gov; Fax: (540) 562-6725.

Tidewater Regional Office, 5636 Southern Boulevard, Virginia Beach, Virginia 23462

The purpose of this notice is to seek public comment on the draft permit from the DEQ that will allow impacts to nontidal wetlands, subaqueous bottom, and perennial and intermittent stream channel in Newport News and York County. Applicant: City of Newport News, c/o Mr. James Bourey, City Manager, City of Newport News, 2400 Washington Avenue, 10th Floor, Newport News, Virginia 23607; Permit No. VWPP No. 13-0611. The City of Newport News has applied for a VWP individual permit to construct modifications to the Lee Hall Reservoir in Newport News and York County, in order to comply with the Virginia Department of Conservation and Recreation Division of Dam Safety regulations.
The DEQ contact: Peggy Emslie, Phone: (757) 518-2109; Email: margaret.emslie@deq.virginia.gov; Fax: (757) 518-2009.

The purpose of this notice is to seek public comment on the draft permit from the DEQ that will allow the release of treated wastewater from a regulated municipal activity into a waterway in Franklin, Virginia. Applicant: City of Franklin, P. O. Box 179, Franklin, Virginia 23851; Permit No. VPDES VA0023922. Facility: City of Franklin WWTP, 501 S. Main Street, Franklin, Virginia 23851. The applicant proposes to release treated domestic wastewater at a design flow rate of 2.0 million gallons per day into a water body.
The DEQ contact: Robert Smithson, Phone: (757) 518-2106; Email: robert.smithsonjr@deq.virginia.gov; Fax: (757) 518-2009.

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director
Maria R. Nold
Regional Director

April 7, 2014

Mr. Robert Randy Martin, City Manager
City of Franklin
207 W. Second Ave.
P. O. Box 179
Franklin, VA 23851

RE: Reissuance of VPDES Permit No. VA0023922
Draft Permit, Fact Sheet and Public Notice

Dear Mr. Martin:

The State Water Control Board is considering reissuing the referenced permit. Please review the enclosed draft permit package with fact sheet and public notice carefully.

Certain public notice procedures must be complied with before the actual permit can be approved. They are as follows:

1. The attached public notice must be published once a week for two consecutive weeks in a newspaper of general local circulation. We have your signed Public Notice Billing Information Form, which will allow the newspaper to bill you for the public notice. In order for you to continue to discharge under state and federal laws, a new permit must be issued by the expiration date of the current permit. The term of the current permit cannot be extended beyond its expiration date if the owner is the cause of the delay in permit reissuance.

2. A minimum of 30 days will be allowed for public response following the date of the first public notice. If no public response is received, or the public response can be satisfactorily answered, then the permit will be processed. However, if there is significant public response, then we may hold a public hearing. You will be advised if this occurs.

If you have any questions or comments on the draft permit or public notice requirements, please contact me at (757) 518-2106.

Sincerely,

Robert E. Smithson, Jr.
Environmental Specialist Senior

Encl: Draft Permit and Fact Sheet
Public Notice

cc: DEQ-TRO ECM File

Rev. 1/1/2013

Public Notice – Environmental Permit

PURPOSE OF NOTICE: To seek public comment on a draft permit from the Department of Environmental Quality that will allow the release of treated wastewater from a regulated municipal activity into a waterway in Franklin, Virginia.

PUBLIC COMMENT PERIOD: 30 days from the first date of this public notice (**date to be inserted by newspaper**)

PERMIT NAME: Virginia Pollutant Discharge Elimination System Permit for wastewater issued by DEQ, under the authority of the State Water Control Board

APPLICANT NAME, ADDRESS AND PERMIT NUMBER: : City of Franklin, P. O. Box 179, Franklin, VA 23851; Permit No. VA0023922

NAME AND ADDRESS OF FACILITY: City of Franklin WWTP, 501 S. Main Street Franklin, VA 23851

PROJECT DESCRIPTION: The City of Franklin has applied for reissuance of a permit for the discharge of their treated domestic waste water, discharging from their municipal wastewater treatment plant to the Blackwater River. The applicant proposes to release treated domestic wastewater at a design flow rate of 2.0 million gallons per day into a water body. The permit will limit the following pollutants to amounts that protect water quality – BOD5, TSS, TRC, D.O., E. Coli, Ammonia-Nitrogen, Total Phosphorus, Cadmium, Copper, Zinc, and Silver. Sludge that is generated will be composted or landfilled. The facility proposes to release treated sewage in Franklin, VA into the Blackwater River in the Chowan and Dismal Swamp watershed. A watershed is the land area drained by a river and its incoming streams.

HOW TO COMMENT AND/OR REQUEST A PUBLIC HEARING: DEQ accepts comments and requests for public hearing hand-delivery, by e-mail, fax or postal mail. All comments and requests must be in writing and be received by DEQ during the comment period. Submittals must include the names, mailing addresses and telephone numbers of the commenter/requester and of all persons represented by the commenter/requester. A request for public hearing must also include: 1) The reason why a public hearing is requested. 2) A brief, informal statement regarding the nature and extent of the interest of the requester or of those represented by the requestor, including how and to what extent such interest would be directly and adversely affected by the permit. 3) Specific references, where possible, to terms and conditions of the permit with suggested revisions. A public hearing may be held, including another comment period, if public response is significant, based on individual requests for a public hearing, and there are substantial, disputed issues relevant to the permit.

CONTACT FOR PUBLIC COMMENTS, DOCUMENT REQUESTS AND ADDITIONAL INFORMATION: ROBERT SMITHSON, DEQ Tidewater Regional Office, 5636 Southern Blvd. Va. Beach 23462. Tel: 757-518-2106 Fax: 757-518-2009. E-mail: robert.smithsonjr@deq.virginia.gov The public may review the draft permit and application at the DEQ office named above by appointment or may request copies of the documents from the contact person listed above.

Conformance Review

75b

Date: 3/31/2014

To: Kristie Britt, TRO

Permit Writer: R.E.Smithson

Facility: City of Franklin WWTP

Permit Number: VA0023922

Issuance, Reissuance or Modification (if Modification describe): reissuance

Permit Expiration Date: 6/22/2014

Waterbody ID (ex: VAT-G15E): VAT-K36R

Topo Name: Franklin 05B

Facility Address: *501 S. Main St., Franklin 23851*

Please Review the subject VPDES permit Package [Application / Fact Sheet/ Part I] for conformance with the applicable Board Adopted plans and indicate one of the following:

X	This Facility is **NOT MENTIONED** in an existing Board adopted water quality management planning document or TMDL.
A natural Conditions Report is completed for the discharge location of the Blackwater. The DO impairment was determined to be natural conditions in the EPA approved Natural Conditions Report. Therefore, no TMDL is required for DO.	
	This Facility will be included
	This Facility **IS MENTIONED** in an existing Board adopted water quality management planning document or TMDL.
	The Facility **APPEARS TO CONFORM** with the plans.
	This Facility **IS NOT IN CONFORMANCE** with the existing Board adopted water quality management planning document and/ or TMDL.

Review will be completed in 15 days of receipt of request.

Additional Comments:

KNB 4/7/2014

MEMORANDUM

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

5636 Southern Boulevard Virginia Beach, VA 23462

SUBJECT: TMP language for City of Franklin WWTP (VA0023922)

TO: Robert Smithson

FROM: Deanna Austin

DATE: 3/26/14

The City of Franklin WWTP is designed at 2.0 MGD and discharges to the Blackwater River. The plant uses UV for disinfection. The table below shows the data gathered during the current permit term (2009-2014).

DESCRIPT	SPECIES	SAMPLEDT	LC50	SURVIVAL	NOEC	TU	LAB
1st Annual Acute	C.d.	05-Dec-10	100	100		1	JR Reed
1st Annual Chronic	P.p.	05-Dec-10		99	99	1.01	JR Reed
2nd Annual Acute	C.d.	04-Dec-11	100	100		1	JR Reed
2nd Annual Chronic	P.p.	04-Dec-11		99	99	1.01	JR Reed
3rd Annual Acute	C.d.	14-Oct-12	100	100		1	JR Reed
3rd Annual Chronic	P.p.	14-Oct-12		99	99	1.01	JR Reed
4th Annual Acute	C.d.	06-Oct-13	100	100		1	JR Reed
4th Annual Chronic	P.p.	06-Oct-13		99	99	1.01	JR Reed

The facility has had continued compliance with their acute and chronic endpoints, therefore no changes are recommended for reissuance. Because the facility is a municipal major facility, toxicity testing must continue on an annual basis using 2 species.

The following TMP language is recommended for the reissuance of the City of Franklin WWTP permit (VA0023922).

E. TOXICS MANAGEMENT PROGRAM (TMP)

1. Biological Monitoring

a. In accordance with the schedule in E.2.below, the permittee shall conduct annual toxicity tests for the duration of the permit.

The permittee shall collect a 24-hour flow-proportioned composite sample of final effluent from outfalls 001 in accordance with the sampling methodology in Part I.A. of this permit. The composite sample for toxicity testing shall be taken at the same time as the monitoring for the outfall in Part 1.A. of this permit. Annual acute and chronic tests shall be conducted for outfall 001 using:

48 Hour Static Acute test using **Ceriodaphnia dubia**

Chronic 7-day Static Renewal Survival and Growth Test with **Pimephales promelas**

b. The acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for the calculation of a valid LC_{50}. Express the results as TU_a (Acute Toxic Units) by dividing 100/ LC_{50} for reporting.

The chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC50 at 48 hours and the IC25 with the NOEC's in the test report.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

c. The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of the effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

d. If, in the testing according to E.1., any toxicity tests that are invalidated, the tests shall be repeated within the testing period that the original test was taken, or if already past that period, within thirty (30) days of notification.

e. The test dilutions shall be able to determine compliance with the following endpoints:

(1) Acute LC_{50} of 100% equivalent to a TU_a of 1.0

(2) Chronic NOEC of 99% equivalent to a TU_c of 1.01

2. Reporting Schedule

The permittee shall report the results and supply **one** complete copy of the toxicity test reports to the Tidewater Regional Office in accordance with the schedule below. A complete report must contain a copy of all laboratory benchsheets, certificates of analysis, and all chains of custody. All data shall be submitted by the 10th of the month following sampling.

(a)	Conduct first annual acute TMP test using Ceriodaphnia dubia and conduct first annual chronic TMP test using Pimephales promelas for outfall 001	By December 31, 2015
(b)	Submit results of all biological tests	By the 10th of the month following sampling but no later than January 10, 2016
(c)	Conduct subsequent annual acute TMP tests using Ceriodaphnia dubia and subsequent annual chronic TMP tests using Pimephales promelas for outfall 001	By December 31, 2016, 2017, and 2018
(d)	Submit subsequent annual biological tests	By the 10th of the month following sampling but no later than January 10, 2017, 2018 and 2019

Smithson Jr., Robert (DEQ)

From: Skiles, Keith (VDH)
Sent: Monday, March 24, 2014 9:45 AM
To: Smithson Jr., Robert (DEQ)
Subject: RE: 2nd reminder: Need DSS Comments On Applications For Franklin WWTP, US NAvy - NAVSECRU & Northwest Rv WTP

Bob,
The Division of Shellfish Sanitation has no comments/objections to the following applications:

VA0088404, Northwest River WTP, Chesapeake, VA
VA0024244- US Naval Support Activity NW Annex WWTP Reissuance, Chesapeake.
VA0023922- City of Franklin WWTP Reissuance, Franklin, Southampton Co.

Let me know if you need anything else.
Keith

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, March 19, 2014 2:57 PM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ)
Subject: 2nd reminder: Need DSS Comments On Applications For Franklin WWTP, US NAvy -NAVSECRU & Northwest Rv WTP

From: Smithson Jr., Robert (DEQ)
Sent: Monday, March 10, 2014 11:33 AM
To: Skiles, Keith (VDH)
Subject: Need Your VPDES Comments On Applications For Franklin WWTP, US NAvy -NAVSECRU & Northwest Rv WTP

Hi Keith,

It has been a little over a month since we solicited DSS comments on the 3 referenced applications. Could you shoot me your responses on these 3 projects, even if it's just an e-mail that DSS has no comments/objections? Thanks

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Wednesday, March 19, 2014 2:57 PM
To: Skiles, Keith (VDH)
Cc: Sauer, Mark (DEQ)
Subject: 2nd reminder: Need DSS Comments On Applications For Franklin WWTP, US NAvy - NAVSECRU & Northwest Rv WTP

From: Smithson Jr., Robert (DEQ)
Sent: Monday, March 10, 2014 11:33 AM 1ST REMINDER
To: Skiles, Keith (VDH)
Subject: Need Your VPDES Comments On Applications For Franklin WWTP, US NAvy -NAVSECRU & Northwest Rv WTP

Hi Keith,

It has been a little over a month since we solicited DSS comments on the 3 referenced applications. Could you shoot me your responses on these 3 projects, even if it's just an e-mail that DSS has no comments/objections? Thanks

76

VIRGINIA DEQ NO EXPOSURE CERTIFICATION
FOR EXCLUSION FROM VPDES INDUSTRIAL ACTIVITY STORMWATER PERMITTING

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its stormwater discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in stormwater discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9VAC25-31-120 E (the VPDES Permit Regulation).

RECEIVED – DEQ
MAR 14 2014
Tidewater Regional Office

Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.

1. **Facility Operator Information**

   Name: Donnie Cagle

   Mailing Address: 501 S. Main Street

   City: Franklin State: VA Zip: 23851 Phone: 757-562-8551

2. **Facility/Site Location Information**

   Facility Name: City of Franklin Wastewater Treatment Plant

   Address: 501 S. Main Street

   City: Franklin State: VA Zip: 23851

   County Name: Southampton

   Latitude: N 36 40' 19" Longitude: W 76 55' 05"

3. **Was the facility or site previously covered under a VPDES stormwater permit?** Yes ☐ No ☑

   If "Yes", enter the VPDES permit number: N/A

4. **SIC/Activity Codes:** Primary: 4952 Secondary (if applicable): _____

5. **Total size of facility/site associated with industrial activity:** 6 acres

6. **Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion?** Yes ☐ No ☑

   If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether stormwater discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

   Less than one acre ☐ One to five acres ☐ More than five acres ☐

7. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are NOT eligible for the No Exposure exclusion.**

	Yes	No
(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to stormwater	☐	☑
(2) Materials or residuals on the ground or in stormwater inlets from spill/leaks	☐	☑
(3) Materials or products from past industrial activity	☐	☑
(4) Material handling equipment (except adequately maintained vehicles)	☐	☑
(5) Materials or products during loading/unloading or transporting activities	☐	☑
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to stormwater does not result in the discharge of pollutants)	☐	☑
(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	☐	☑
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger	☐	☑
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	☐	☑
(10) Application or disposal of process wastewater (unless otherwise permitted)	☐	☑
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater outflow	☐	☑

8. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES stormwater permitting; and that there are no discharges of stormwater contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9VAC25-31-120 E 2).

I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of stormwater associated with industrial activity from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: Russell L. Pace

Print Title: Director of Public Works

Email Address: rpace@franklinva.com

Signature: Russell L. Pace Date: 3/12/14

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____ Date: _____

Molly Joseph Ward
Secretary of Natural Resources

Joe Elton
Interim Director

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

600 East Main Street, 24th Floor
Richmond, Virginia 23219
(804) 786-6124

March 12, 2014

Robert Smithson
DEQ-TRO
5636 Southern Boulevard
Virginia Beach, VA 23462

Re: VA0023922, City of Franklin WWTP

Dear Mr. Smithson:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, the Mantled baskettail (*Epitheca semiaquea*, G5/S1/NL/NL) has been historically documented in the Blackwater River. The Mantled baskettail is a medium-sized, state rare dragonfly that is found in open water areas along the east coast from Florida to southern Canada, and in Texas and Oklahoma (Dunkle, 2000). In Virginia, it is known from only a single location in the Coastal Plain. The usual habitat for this dragonfly is clear-water, sand-bottom lakes and stream pools. Like all adult dragonflies, it is predaceous, consuming smaller dragonflies and other aquatic and flying insect.

Adult Odonata (dragonflies and damselflies) lay their eggs on emergent vegetation or debris at the water's edge. Unlike the adults, the larvae are aquatic where they typically inhabit the sand and gravel of the substrates. Wingless and possessing gills, they crawl about the submerged leaf litter and debris stalking their insect prey. The larvae seize unsuspecting prey with a long, hinged "grasper" that folds neatly under their chin. When larval development is complete, the aquatic larvae crawl from the water to the bank, climb up the stalk of the shoreline vegetation, and the winged adult emerges (Hoffman 1991; Thorpe and Covich 1991).

Because of their aquatic lifestyle and limited mobility, the larvae are particularly vulnerable to shoreline disturbances that cause the loss of shoreline vegetation and siltation. They are also sensitive to alterations that result in poor water quality, aquatic substrate changes, and thermal fluctuations.

To minimize impacts to aquatic resources, DCR recommends the use of uv/ozone to replace chlorination disinfection and utilization of new technologies as they become available to improve water quality.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from http://vafwis.org/fwis/ or contact Gladys Cason (804-367-0909 or Gladys.Cason@dgif.virginia.gov).

Should you have any questions or concerns, feel free to contact me at (804) 692-0984. Thank you for the opportunity to comment on this project.

Sincerely,

Alli Baird

Alli Baird, LA, ASLA
Coastal Zone Locality Liaison

Literature Cited

Dunkle, S. W. 2000. Dragonflies through binoculars: A field guide to dragonflies of North America. Oxford University Press. New York, NY. 266 pp.

Hoffman, R. 1991. Arthropods. Pp. 173 in: K. Terwilliger (ed.), Virginia's Endangered Species: proceedings of a symposium. The McDonald and Woodward Publishing Company, Blacksburg, VA.

Thorpe, J.H., and A.P. Covich. 1991. Ecology and Classification of North American Freshwater Invertebrates. Academic Press, Inc., San, Diego, California.

Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

Web Project ID: WEB0000001600

Client Project Number:

PROJECT INFORMATION

TITLE: VA0023922-City of Franklin WWTP (reissuance)

DESCRIPTION: The facility is listed on the DCR list of projects for review for FY14.

EXISTING SITE CONDITIONS: N/A

QUADRANGLES: Franklin

COUNTIES: Isle of Wight, City of Franklin

Latitude/Longitude (DMS): 36°40'27.2950"N / 76°55'0.8496"W

Acreage: 2 acres

Comments: One permitted outfall (001): your map system does not allow for multiple shapes to designate specific outfalls. The reissuance application is attached with maps. Because your site only allows for 2MB, a link to the external FTP site is attached where the application can be found. Please copy the entire link into your browser. http://www.deq.virginia.gov/fileshare/wps/permit/tro/VDH, DSS, VMRC For Review/VA0023922 City of Franklin WWTP 2014/

REQUESTOR INFORMATION

Priority: N | Tier Level: Tier II | Tax ID:

Contact Name: Robert Smithson

Company Name: DEQ-Tidewater Regional Office

Address: 5636 Southern Blvd.

City: Va. Beach | State: VA | Zip: 23462

Conservation Site	Site Type	Brank	Acreage	Listed Species Presence
ROUTE 618 PINE BARRENS	Conservation Site	B2	705	NL
ANTIOCH SWAMP SCU	SCU	B3	3158	SL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL

Natural Heritage Screening Features within Search Radius

Site Name	Group Name	Common Name	Scientific Name	GRANK	SRANK	Fed Status	State Status	EO Rank	Last Obs Date	Precision
	Invertebrate Animal	Mantled Baskettail	Epitheca semiaquea	G5	S1			H	5/20/1977	S
ROUTE 618 PINE BARRENS	Vascular Plant	Fasciculate Beakrush	Rhynchospora fascicularis	G5	S1			D	7/3/2002	
	Vascular Plant	Senna seymeria	Seymeria cassioides	G5	S1S2			H	8/28/1967	G
ROUTE 618 PINE BARRENS	Vascular Plant	Wooly Chaffhead	Carphephorus tomentosus	G4	S1			C	8/21/2002	
	Vascular Plant	Wooly Chaffhead	Carphephorus tomentosus	G4	S1			H	9/2/1940	G
	Vascular Plant	Creeping Blueberry	Vaccinium crassifolium	G4G5	S1			H	5/29/1966	G
ROUTE 618 PINE BARRENS	Vascular Plant	Creeping Blueberry	Vaccinium crassifolium	G4G5	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Carolina yellow-eyed grass	Xyris caroliniana	G4G5	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Common pyxie-moss	Pyxidanthera barbulata var. barbulata	G4	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Sheep laurel	Kalmia angustifolia	G5	S2			C	8/21/2002	S
	Vascular Plant	Longleaf pine	Pinus palustris	G5	S1			H	1981-	M
ROUTE 618 PINE BARRENS	Vascular Plant	Longleaf pine	Pinus palustris	G5	S1			CD	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Sandy-woods Chaffhead	Carphephorus bellidifolius	G4	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Sandy-woods Chaffhead	Carphephorus bellidifolius	G4	S1			D	8/25/1995	S

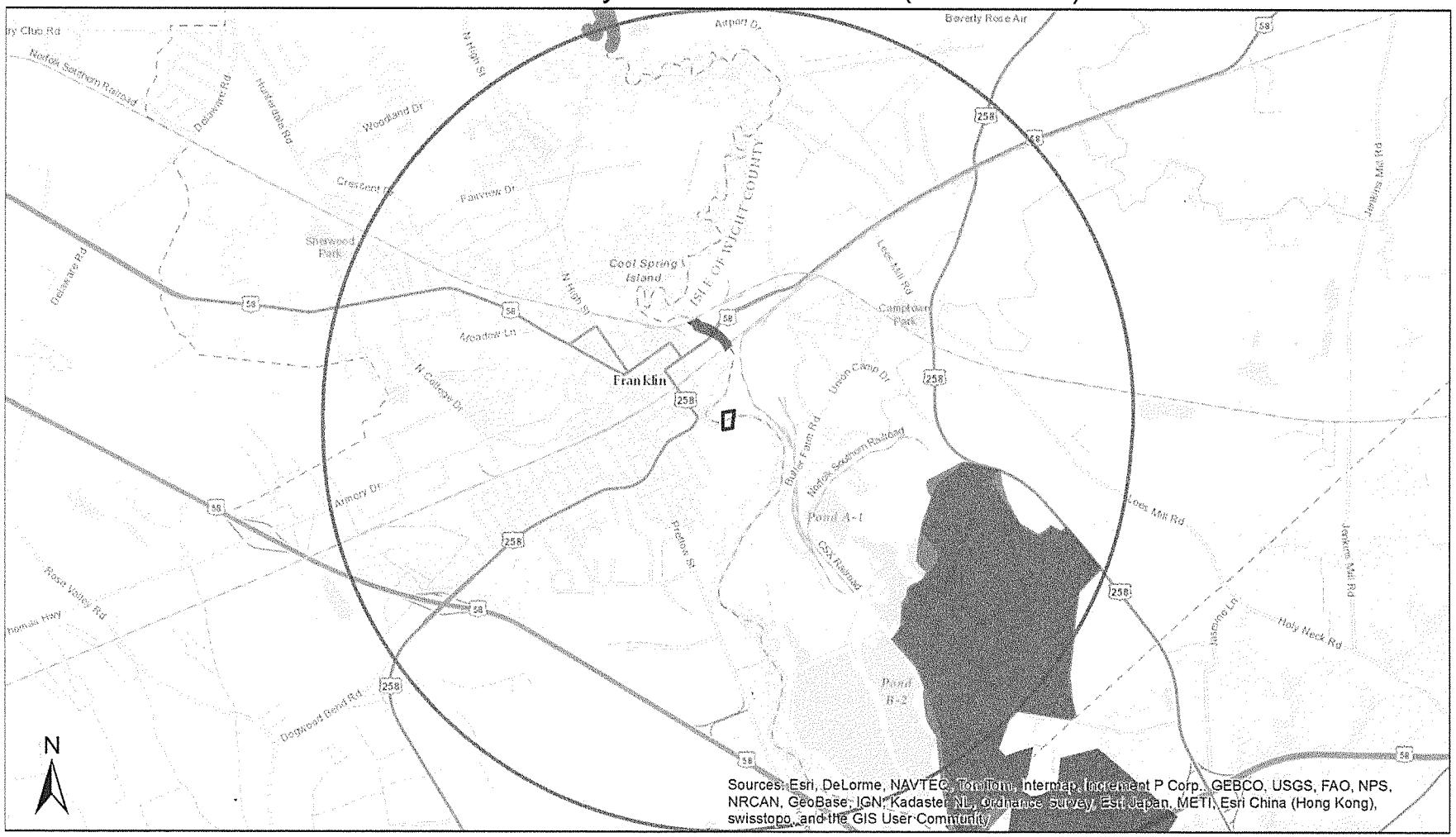
Site Name	Group Name	Common Name	Scientific Name	GRANK	SRANK	Fed Status	State Status	EO Rank	Last Obs Date	Precision
ROUTE 618 PINE BARRENS	Vascular Plant	Pineland Tick-trefoil	Desmodium strictum	G4	S2			C	8/21/2002	
	Vascular Plant	Savannah beaksedge	Rhynchospora debilis	G4?	S1			H	8/28/1967	G
ROUTE 618 PINE BARRENS	Vascular Plant	Pineland Scaly-pink	Stipulicida setacea var. setacea	G4G5T 4T5	S1			C	8/21/2002	
	Vascular Plant	Pineland Scaly-pink	Stipulicida setacea var. setacea	G4G5T 4T5	S1			H	1981-	M
ROUTE 618 PINE BARRENS	Natural Community	Longleaf Pine / Scrub Oak Sandhill Woodland	Pinus palustris - (Pinus serotina) / Quercus laevis / Gaylussacia frondosa - Kalmia angustifolia - Vaccinium tenellum Woodland	G1	S1			CD	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Dwarf wax myrtle	Morella pumila	G5TNR	S1			C	9/5/2012	S

Natural Heritage Resources within Search Radius

Intersecting Predictive Models

Predictive Model Results

VA0023922-City of Franklin WWTP (reissuance)



Project Area
Buffered Project Area
NH Screening Features
Conservation Site
GLNHR
SCU

1:51,875
0 0.425 0.85 1.7 mi
0 0.5 1 2 km

Quads: Franklin

Counties: Isle of Wight, City of Franklin

Company: DEQ-Tidewater Regional Office

Lat/Long: 364027 / -765500

COMMONWEALTH of VIRGINIA

DEPARTMENT OF CONSERVATION AND RECREATION

The project mapped as part of this report has been searched against the Department of Conservation and Recreation's Biotics Data System for occurrences of natural heritage resources from the area indicated for this project. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in Biotics files, NATURAL HERITAGE RESOURCES HAVE BEEN DOCUMENTED within two miles of the indicated project boundaries and/or POTENTIAL HABITAT FOR NATURAL HERITAGE RESOURCES intersect the project area.

You have submitted this project to DCR for a more detailed review for potential impacts to natural heritage resources. DCR will review the submitted project to identify the specific natural heritage resources in the vicinity of the proposed project. Using the expertise of our biologists, DCR will evaluate whether your specific project is likely to impact these resources, and if so how. DCR's response will indicate whether any negative impacts are likely and, if so, make recommendations to avoid, minimize and/or mitigate these impacts. If the potential negative impacts are to species that are state- or federally-listed as threatened or endangered, DCR will also recommend coordination with the appropriate regulatory agencies: the Virginia Department of Game and Inland Fisheries for state-listed animals, the Virginia Department of Agriculture and Consumer Services for state-listed plants and insects, and the United States Fish and Wildlife Service for federally listed plants and animals. If your project is expected to have positive impacts we will report those to you with recommendations for enhancing these benefits.

There will be a charge for this service for "for profit companies": $60, plus an additional charge of $35 for 1-5 occurrences and $60 for 6 or more occurrences.

Please allow up to 30 days for a response, unless you requested a priority response (in 5 business days) at an additional surcharge of $500. An invoice will be provided with your response.

We will review the project based on the information you included in the Project Info submittal form, which is included in this report. Also any additional information including photographs, survey documents, etc. attached during the project submittal process and/or sent via email referencing the project title (from the first page of this report).

Thank you for submitting your project for review to the Virginia Natural Heritage Program through the NH Data Explorer. Should you have any questions or concerns about DCR, the Data Explorer, or this report, please contact the Natural Heritage Project Review Unit at 804-371-2708.

Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

Web Project ID: WEB0000001600

Client Project Number:

PROJECT INFORMATION

TITLE: VA0023922-City of Franklin WWTP (reissuance)

DESCRIPTION: The facility is listed on the DCR list of projects for review for FY14.

EXISTING SITE CONDITIONS: N/A

QUADRANGLES: Franklin

COUNTIES: Isle of Wight, City of Franklin

Latitude/Longitude (DMS): 36°40'27.2950"N / 76°55'0.8496"W

Acreage: 2 acres

Comments: One permitted outfall (001): your map system does not allow for multiple shapes to designate specific outfalls. The reissuance application is attached with maps. Because your site only allows for 2MB, a link to the external FTP site is attached where the application can be found. Please copy the entire link into your browser. http://www.deq.virginia.gov/fileshare/wps/permit/tro/VDH, DSS, VMRC For Review/VA0023922 City of Franklin WWTP 2014/

REQUESTOR INFORMATION

Priority: N | Tier Level: Tier II | Tax ID:

Contact Name: Robert Smithson

Company Name: DEQ-Tidewater Regional Office

Address: 5636 Southern Blvd.

City: Va. Beach | State: VA | Zip: 23462

Conservation Site	Site Type	Brank	Acreage	Listed Species Presence
ROUTE 618 PINE BARRENS	Conservation Site	B2	705	NL
ANTIOCH SWAMP SCU	SCU	B3	3158	SL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL
	GLNHR	NA	0	NL

Natural Heritage Screening Features within Search Radius

Site Name	Group Name	Common Name	Scientific Name	GRANK	SRANK	Fed Status	State Status	EO Rank	Last Obs Date	Precision
	Invertebrate Animal	Mantled Baskettail	Epitheca semiaquea	G5	S1			H	5/20/1977	S
ROUTE 618 PINE BARRENS	Vascular Plant	Fasciculate Beakrush	Rhynchospora fascicularis	G5	S1			D	7/3/2002	
	Vascular Plant	Senna seymeria	Seymeria cassioides	G5	S1S2			H	8/28/1967	G
ROUTE 618 PINE BARRENS	Vascular Plant	Wooly Chaffhead	Carphephorus tomentosus	G4	S1			C	8/21/2002	
	Vascular Plant	Wooly Chaffhead	Carphephorus tomentosus	G4	S1			H	9/2/1940	G
	Vascular Plant	Creeping Blueberry	Vaccinium crassifolium	G4G5	S1			H	5/29/1966	G
ROUTE 618 PINE BARRENS	Vascular Plant	Creeping Blueberry	Vaccinium crassifolium	G4G5	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Carolina yellow-eyed grass	Xyris caroliniana	G4G5	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Common pyxie-moss	Pyxidanthera barbulata var. barbulata	G4	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Sheep laurel	Kalmia angustifolia	G5	S2			C	8/21/2002	S
	Vascular Plant	Longleaf pine	Pinus palustris	G5	S1			H	1981-	M
ROUTE 618 PINE BARRENS	Vascular Plant	Longleaf pine	Pinus palustris	G5	S1			CD	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Sandy-woods Chaffhead	Carphephorus bellidifolius	G4	S1			C	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Sandy-woods Chaffhead	Carphephorus bellidifolius	G4	S1			D	8/25/1995	S

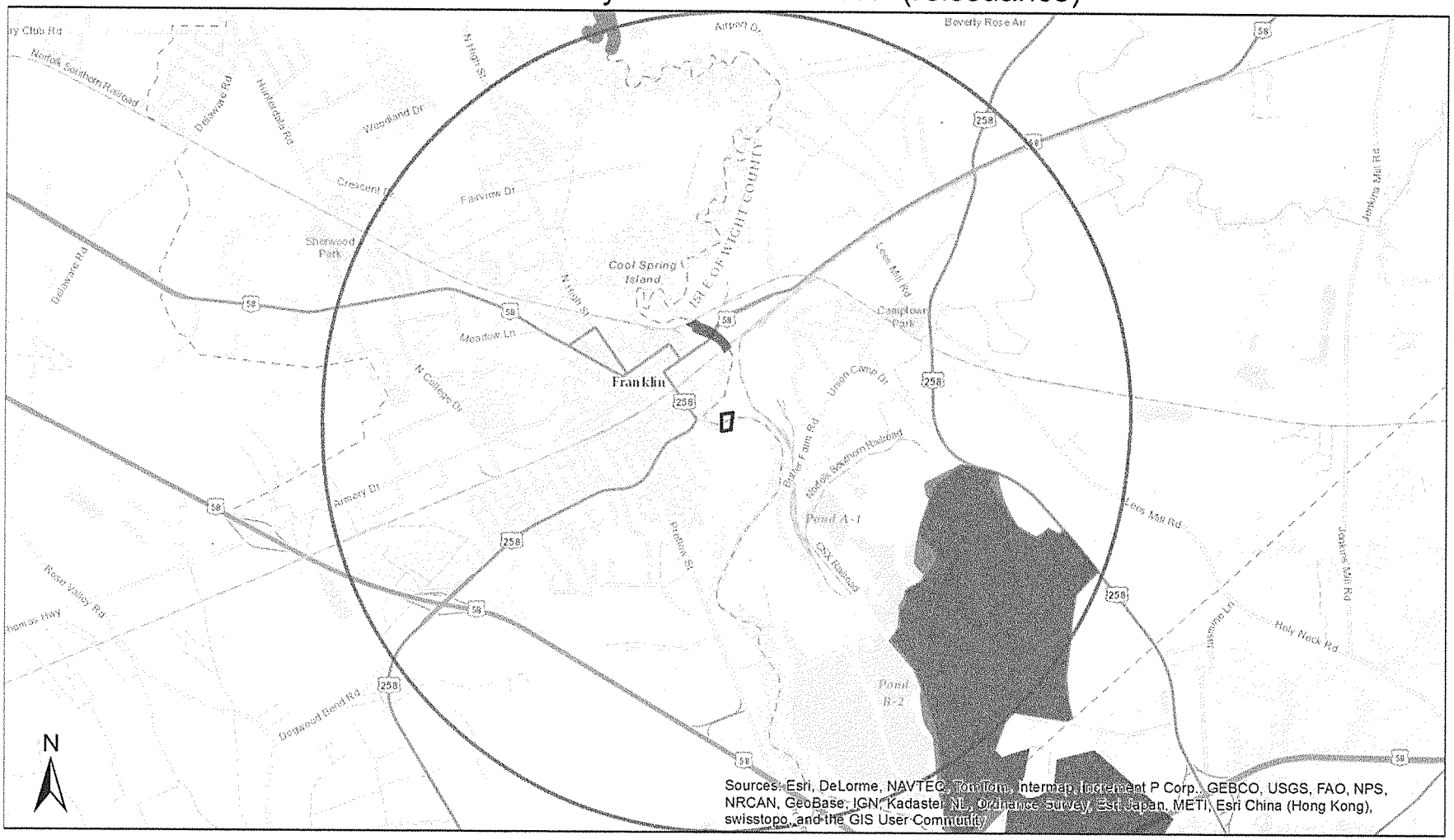
Site Name	Group Name	Common Name	Scientific Name	GRANK	SRANK	Fed Status	State Status	EO Rank	Last Obs Date	Precision
ROUTE 618 PINE BARRENS	Vascular Plant	Pineland Tick-trefoil	Desmodium strictum	G4	S2			C	8/21/2002	
	Vascular Plant	Savannah beaksedge	Rhynchospora debilis	G4?	S1			H	8/28/1967	G
ROUTE 618 PINE BARRENS	Vascular Plant	Pineland Scaly-pink	Stipulicida setacea var. setacea	G4G5T 4T5	S1			C	8/21/2002	
	Vascular Plant	Pineland Scaly-pink	Stipulicida setacea var. setacea	G4G5T 4T5	S1			H	1981-	M
ROUTE 618 PINE BARRENS	Natural Community	Longleaf Pine / Scrub Oak Sandhill Woodland	Pinus palustris - (Pinus serotina) / Quercus laevis / Gaylussacia frondosa - Kalmia angustifolia - Vaccinium tenellum Woodland	G1	S1			CD	8/21/2002	
ROUTE 618 PINE BARRENS	Vascular Plant	Dwarf wax myrtle	Morella pumila	G5TNR	S1			C	9/5/2012	S

Natural Heritage Resources within Search Radius

Intersecting Predictive Models

Predictive Model Results

VA0023922-City of Franklin WWTP (reissuance)



Project Area
Buffered Project Area
NH Screening Features
Conservation Site
GLNHR
SCU

1:51,875
0 0.425 0.85 1.7 mi
0 0.5 1 2 km

Quads: Franklin

Counties: Isle of Wight, City of Franklin

Company: DEQ-Tidewater Regional Office

Lat/Long: 364027 / -765500

90

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

February 20, 2014

Mr. Russell L. Pace, Director of Public Works
City of Franklin, Dept. of Public Utilities
P. O. Box 179
Franklin, VA 23851

RE: VPDES Permit Reissuance VA0023922
Franklin Waste Water Treatment Plant
Franklin, VA

Dear Mr. Pace:

Your revised application with replacement pages was **received February 14, 2014** has been reviewed and it appears to be complete. Other reviews of the application will be required by state agencies to ensure that public health and the environment will be protected.

The next steps involve assembling the information necessary to develop the permit limitations and then drafting the permit. Once the draft permit is prepared and the appropriate reviews are performed, I will transmit the draft permit and supporting documentation to you for review.

Thank you for your cooperation and that of your consultant in submitting the completed application. If you have any questions about our procedures or the status of your draft permit, please feel free to call me at (757) 518-2106.

Sincerely,

Robert E. Smithson
Environmental Specialist Senior

cc: DEQ ECM File
Mr. Donnie Cagle, Operator via e-mail

FACILITY NAME: City of Franklin WWTP **VPDES PERMIT NUMBER: VA 0023922**

SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Complete this section if your facility generates sewage sludge or derives a material from sewage sludge

1. Amount Generated On Site.
   Total dry metric tons per 365-day period generated at your facility: 839 dry metric tons

2. Amount Received from Off Site. If your facility receives sewage sludge from another facility for treatment, use or disposal, provide the following information for each facility from which sewage sludge is received. If you receive sewage sludge from more than one facility, attach additional pages as necessary.
   a. Facility name: N/A
   b. Contact Person: N/A
      Title: ____ N/A
      Phone ( ) N/A
   c. Mailing address: N/A
      Street or P.O. Box: N/A
      City or Town: N/A State: N/A Zip: N/A
   d. Facility Address: N/A
      (not P.O. Box)
   e. Total dry metric tons per 365-day period received from this facility: N/A dry metric tons
   f. Describe, on this form or on another sheet of paper, any treatment processes known to occur at the off-site facility, including blending activities and treatment to reduce pathogens or vector attraction characteristics:

      N/A

3. Treatment Provided at Your Facility.
   a. Which class of pathogen reduction is achieved for the sewage sludge at your facility?
      X Class A ___Class B ___Neither or unknown
   b. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce pathogens in sewage sludge: Static Aerated Pile Compost

   c. Which vector attraction reduction option is met for the sewage sludge at your facility?
      ___ Option 1 (Minimum 38 percent reduction in volatile solids)
      ___ Option 2 (Anaerobic process, with bench-scale demonstration)
      ___ Option 3 (Aerobic process, with bench-scale demonstration)
      ___ Option 4 (Specific oxygen uptake rate for aerobically digested sludge)
      X Option 5 (Aerobic processes plus raised temperature)
      ___ Option 6 (Raise pH to 12 and retain at 11.5)
      ___ Option 7 (75 percent solids with no unstabilized solids)
      ___ Option 8 (90 percent solids with unstabilized solids)
      ___ None or unknown
   d. Describe, on this form or another sheet of paper, any treatment processes used at your facility to reduce vector attraction properties of sewage sludge: Aerobic Digestion; Static Aerated Pile Composting

   e. Describe, on this form or another sheet of paper, any other sewage sludge treatment activities, including blending, not identified in a - d above: Sludge Composting

COMMONWEALTH of VIRGINIA

DEPARTMENT OF HEALTH

OFFICE OF DRINKING WATER

Southeast Virginia Field Office

830 Southampton Avenue
Suite 2058
Norfolk, VA 23510
Phone (757) 683-2000
Fax (757) 683-2007

MEMORANDUM

TO: Robert E. Smithson, Jr.
Environmental Specialist Senior
Department of Environmental Quality – Tidewater Regional Office

DATE: FEB 05 2014

FROM: Daniel B. Horne, PE
Engineering Field Director DBH

RECEIVED – DEQ
FEB 07 2014
Tidewater Regional Office

CITY/COUNTY: City of Franklin

PROJECT TYPE: ☐ New ☑ Renewal or Revision

☑ VPDES ☐ VPA ☐ VWPP ☐ JPA ☐ Other: _____

☑ Number: VA0023922

OWNER/APPLICANT: City of Franklin

PROJECT: City of Franklin WWTP

☐ There are no public water supply raw water intakes located within 15 miles downstream or within one tidal cycle upstream of the existing project.

☑ The raw water intake for the City of Norfolk waterworks is located approximately 15 miles upstream of the discharge. This should be a sufficient distance to minimize the impacts of the discharge. We recommend a minimum Reliability Class I for this facility.

☐ The raw water intake for the _____ waterworks is located _____ miles [downstream/upstream (within one tidal cycle)] of the discharge.

☐ Please forward a copy of the Draft Permit for our review and comment.

☐ Comments:

Prepared by: Renée S. Hall
Renée S. Hall
District Engineer

pc: V.D.H. - Office of Drinking Water, Field Services Engineer
Ms. Kristen M. Lentz, PE, Director, Department of Public Utilities, City of Norfolk

\\Odwsevfo\district\DIST20B\FRANKLIN\General\Franklin WWTP VPDES DEQ memo 2-2014.docx

Smithson Jr., Robert (DEQ)

From: Smithson Jr., Robert (DEQ)
Sent: Friday, January 31, 2014 3:14 PM
To: Horne, Daniel (VDH); Howell, Beth (MRC); Stagg, Ben (MRC); Skiles, Keith (VDH)
Cc: 'Donnie Cagle'
Subject: Permit Application for Review- Permit No. VA0023922- City of Franklin WWTP Reissuance, Franklin, Southampton Co.

Attached is a link to the FTP site to access a permit application for your review. Under the folder for the facility listed above on the FTP site, there is a letter for each agency and the permit application, which may be in one or more files. Please pull the information that you need off the FTP site. The letters and application will remain available for no longer than 30 days. If you have any issues with the FTP site or if you have any questions, please contact me.

http://www.deq.virginia.gov/fileshare/wps/permit/tro/VDH,%20DSS,%20VMRC%20For%20Review/VA0023922%20City%20of%20Franklin%20WWTP%202014/

94

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

January 9, 2014

Mr. Russell L. Pace, Director of Public Works
City of Franklin
P. O. Box 179
Franklin, VA 23851

Re: Incomplete Application for Re-issuance of VPDES Permit No. VA0023922
City of Franklin WWTP, Franklin, VA

Dear Mr. Pace:

We have reviewed the referenced application which was received December 20, 2013 and find that it is missing a number of completed forms requested in our June 13, 2013 reissuance reminder letter. The submittal package did not contain the following required forms:.

The VPDES Permit Application Addendum
The VPDES Permit Annual Maintenance Fee Form
The VPDES Public Notice Billing Authorization Information Form (which was previously enclosed).

Our letter of June 13, 2013 indicated that the permit application addendum and VPDES Permit Annual Maintenance fee form are further down under the heading "miscellaneous forms/information". Please fill out all of these and submit them along with the enclosed public notice authorization form **by January 28th, 2014**. I have also included hard copies of these forms for your convenience. These forms can also be found at
http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/PermitsFees.aspx
http://www.deq.virginia.gov/export/sites/default/vpdes/documents/VPDES_Permit_Application_Addendum.doc
http://www.deq.virginia.gov/export/sites/default/vpdes/documents/Permit_Billing_Information_Form.doc

In addition to these omissions, 1) we also noted that section D of the sludge form was left blank, as well as other pages that should show N/A. All pages of this form that do not apply should be marked N/A where it applies; 2) Only one copy of the application forms were submitted; 3) We also request an updated Bio Green Compost information sheet similar to the one submitted with the 2009 permit application if one is available and 4) better copies of the maps submitted with the latter half of the Sewage sludge application form be submitted at this time.

Upon completing the applications and other forms, return the original and two copies to the Tidewater Regional Office at the above address. If you have the technology available however, we would prefer that the original signature application and a disk/CD or an e-mail with the application attached be submitted. This would eliminate the requirement of submitting two copies.

Please call me at (757) 518-2106 if you have any questions.

Sincerely,

Robert E. Smithson, Jr.
Environmental Specialist Senior

Encl: Public Notice Authorization to Bill Form
VPDES Application Addendum
Permit Billing Information form

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
TIDEWATER REGIONAL OFFICE
5636 Southern Boulevard, Virginia Beach, Virginia 23462
(757) 518-2000 Fax (757) 518-2009
www.deq.virginia.gov

Doug Domenech
Secretary of Natural Resources

David K. Paylor
Director

Maria R. Nold
Regional Director

June 13, 2013

Mr. Russell L. Pace, Director of Public Works
City of Franklin
P. O. Box 179
Franklin, VA 23851

Re: Re-issuance of VPDES Permit No. VA0023922
City of Franklin WWTP, Franklin, VA

Dear Mr. Pace:

This letter is to remind you that your VPDES permit will expire on June 22, 2014 .

If you wish to continue discharging, you must reapply for the permit. The State Water Control Board's VPDES Permit Regulation requires that we receive a complete application at least 180 days before the existing permit expires. The deadline for submitting the application is ***December 24, 2013***. Early submissions are welcome and will better enable us to complete processing before permit expiration. You are required to submit the following forms: **Form 2A, the Permit Application Addendum, the Sludge Application, the VPDES Permit Annual Maintenance Fee Form, and the VPDES Public Notice Billing Authorization Information Form (enclosed)**. Forms 2A and the Sludge Application are under the heading "Application Forms and Information". The permit application addendum and VPDES Permit Annual Maintenance fee form are further down under the heading "miscellaneous forms/information". Please fill out all of these and submit them along with the enclosed public notice authorization form. These forms can be found at
http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/PermitsFees.aspx
http://www.deq.virginia.gov/export/sites/default/vpdes/pdf/EPAForm3510-2A.pdf
http://www.deq.virginia.gov/export/sites/default/vpdes/documents/VPDES_Permit_Application_Addendum.doc
http://www.deq.virginia.gov/export/sites/default/vpdes/documents/Permit_Billing_Information_Form.doc
http://www.deq.virginia.gov/export/sites/default/vpdes/pdf/VA_Sludge_App-rev2000.pdf

If you have difficulty locating/downloading any forms, please contact me. If you would like to request a waiver from any of the sampling or testing requirements in the application forms, you must submit your application and a thorough justification for the request at least 240 days prior to the exiting permit's expiration date. These waiver requests must be approved by DEQ and the U.S. EPA at least 180 days before the existing permit expires. DEQ will review your waiver request and, if it is justified, forward it to EPA. Failure to submit the waiver request by the 240 day deadline may result in the waiver being denied.

Upon completing the applications and other forms, return the original and two copies to the Tidewater Regional Office at the above address. If you have the technology available however, we would prefer that the original signature application and a disk/CD or an e-mail with the application attached be submitted. This would eliminate the requirement of submitting two copies.

There is no application fee for a regularly scheduled reissuance of an individual permit; that fee has been replaced by an annual permit maintenance fee which is to be paid by October 1 of each year. No permit will be reissued unless all maintenance fee payments are up to date.

DEQ has launched an e-DMR program that allows you to submit the effluent data electronically. There are many benefits to both DEQ and the permittee when e-DMR is utilized for submissions.

1) Fewer revisions for data since the e-DMR program automatically flags omissions before the data is submitted;
2) Cost savings on postage, copying, and paper;
3) No concerns about using the most current DMR – e-DMR refreshes the required parameters automatically when changes are needed;
4) Submittals can be made on a timelier basis; and
5) Electronic signatures from multiple people are allowed and e-DMR can be accessed from multiple computer locations.

We ask that you apply for e-DMR participation now so that we will be able to complete the application process when your permit is effective. The following website provides details:
http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/ElectronicDMRsubmissions.aspx

Please call me at (757) 518-2106 if you have any questions.

Sincerely,

Robert E. Smithson, Jr.
Environmental Specialist Senior

Encl: Public Notice Authorization to Bill Form